Communities in the Platinum Minefields



POLICY GAP 6

A Review of Platinum Mining in the Bojanala District of the North West Province:

A Participatory Action Research (PAR) Approach

The Bench Marks Foundation



The research was commissioned by the **Bench Marks Foundation**, and was conducted by: David van Wyk, Mudjadji Trading (Pty) Ltd in collaboration with the **Bench Marks Centre for Corporate Social Responsibility** at the North-West University, Potchefstroom Campus, and the **Bench Marks Community Monitoring School**.

The Bench Marks Foundation PO Box 62538 Marshalltown 2107 Johannesburg South Africa

Tel/Fax: +27 11 832-1750

Tel: +27 11 832-1743/2

www.bench-marks.org.za



Table of Contents

Acknowledgementsi		
The B	ench Marks Foundation	ii
Forew	/ord	iii
Prefac	ce	ν
Execu	ıtive Summary	vi
Conte	extualised Quotes	ix
	INTRODUCTION	
1.1	Background	
1.2	Objectives	
	RESEARCH METHODOLOGY	
2.1	Research Locus	
2.2	Participatory Action Research (PAR)	
2.3 2.4	PAR Research ProcessFirst and Second Phase: The Self-Perception (Private Image) and the Public	
۷. 4	of the Corporations	
2.5	Third Phase: The Experienced/Reputational Personalities of the Corporation	ns under
	Review	
2.5.1	Social Communication	
2.5.2	Taking Pictures	
2.5.3 2.5.4	Participatory Mapping	
2.5.4	Story WritingFourth Phase: Review of Policy Gap 1	
	, ,	
3. 3.1	The Corporation	
3.1 3.2	The Corporation The Bench Marks Principles for Global Corporate Responsibility	
3.3	The Corporate Personality Approach	
4. 4.1	PROFILE OF BOJANALA DISTRICT	
4.1 4.2	Background on the Bojanala District The Employment Profile of the District	
4.3	The Services and Infrastructure Situation in the Bojanala District	
4.4	Housing Backlog in the Bojanala District	
4.5	Education Facilities in the Bojanala District	38
4.6	Health and HIV/AIDS in the Bojanala District	
4.7	Comments on the Bojanala District Profile	
5.	FINDINGS	43
5.1	Anglo Platinum	43
5.1.1	Private and Public Personalities	43
5.1.2	The Experienced Personality of Anglo Platinum	46
5.1.2.		
5.1.2.2	J 1	
5.1.2.3		
5.1.2.4	I I	
	5 People with Disabilities, Mine Health and Safety	
5.1.2.0 5.2	Impala Platinum	
5.2.1	Private and Public Personalities	

5.2.1.1	Sustainability	61
5.2.1.2	Employee Health and Safety	62
5.2.1.3	HIV/AIDS	62
5.2.1.4	Tuberculosis	63
5.2.1.5	Environmental Performance	63
5.2.1.6	Social Performance	
5.2.2	The Experienced Personality of Impala Platinum	
5.2.2.1	Mine Fatalities	
5.2.2.2	Environmental Impacts	
5.3	Lonmin	
5.3.1	Private and Public Personalities	
5.3.2	Lonmin's Experienced Personality	
5.3.2.1	Worker Health and Safety	
5.3.2.1	Lonmin and Local Employment in Marikana	
5.3.2.3	Lonmin CSR project in Marikana	
5.3.2.4	The Impact of Mining on Commercial Agriculture in the Marikana Area	
5.4	Xstrata	
5.4.1	Public and Private Personalities	
5.4.1.1	Xstrata's HIV/AIDS Programmes	
5.4.1.2	Employment	
5.4.2	The Experienced Personality of Xstrata	
5.4.2.1	HIV/AIDS Impacts on Mineworkers and Communities	86
5.4.2.2	Employment of Locals	
5.4.2.3	General	
5.5	Aquarius	
5.5.1	Private and Public Personalities	
5.5.1.1	Risk Management	
5.5.1.2	Black Economic Empowerment	
5.5.1.3	Creating Employment	
5.5.1.4	Accommodation and Nutrition	
5.5.1.5	Corporate Social Responsibility and Local Economic Development	94
5.5.2	The Experienced Personality of Aquarius as Reflected by the Communities of	
	Ikemeleng and Marikana	
5.5.2.1	Black Economic Empowerment – a Critical View	
5.5.2.2	0 1 /	
5.5.2.3	Accommodation and Nutrition	101
5.5.2.4	Corporate Social Responsibility and Local Economic Development	101
5.6	Royal Bafokeng Platinum Limitied (RBPL)	101
5.6.1	Private and Public Personalities	101
5.6.1.1	Ownership	103
5.6.1.2	Risk Management	104
5.6.1.3	Stakeholder Interaction	105
5.6.1.4	HIV/AIDS	105
5.6.2	The Experienced Personality of the Bafokeng Platinum Mines (Chaneng and Lul	ka
	Communities)	
5.6.2.1	The Contested History of Landownership	
	A Grave Matter – the RBN, RBH, RBP as Custodians of Traditional Culture in	
	Phokeng	108
5.6.2.3	Ownership as Seen from the Community	
	HIV/AIDS and Health	
	Local Employment	
	Luka Village	
	G .	
	ONCLUSION	
6.1	Corporate Personalities Assessed	11/

7.	RECOMMENDATIONS	122
7.1	Background	122
7.2	The South African Parliament	122
7.3	The South African Government	124
7.3.1	Environment	124
7.3.2	Living Conditions and Housing	124
7.3.3	Health and Safety	125
7.3.4	Women in Mining	125
7.4	The South African Human Rights Commission	125
7.5	Civil Society Organisations	126
7.6	Corporate Social Responsibility	126
7.6.1	Social Relations, Communities and CSR	126
7.6.2	Failed CSR Programmes	127
7.7	Recommendations for all Companies Surveyed in this Study	128
7.7.1	Economic Issues: Local Employment and Subcontracting	128
7.7.2	Employee Health and Safety	128
7.7.3	Social Issues	129
7.7.4	Environmental Issues	130
7.8	Specific Company Recommendations	130
7.8.1	Anglo Platinum	130
7.8.2	Impala	131
7.8.3	Aquarius	133
7.8.4	Xstrata	133
7.8.5	Lonmin	134
7.8.6	Royal Bafokeng Mining	134
Anne	xure 1: Comparison of Findings from Policy Gap 1 and Policy Gap 6	136
Biblio	ography	143

LIST OF TABLES

Table 1:	The Bench Marks Principles	24
Table 2:	The impact of mining on water throughout the life of a mine	33
Table 3:	Education facilities in the Bojanala District by type	38
Table 4:	Schedule of visits to platinum mines in Zimbabwe	48
Table 5:	The use of contractors by Implats vs full-time employees	66
Table 6:	Lonmin's achievements and challenges	71
Table 7:	Percentage of employees at SA operations living within a 50km radius	92
Table 8:	The accommodation profile of Aquarius employees	94
Table 9:	Record of farms bought by communities	106
Table 10:	Number of families interviewed per section of the village	113
Table 11:	Employment profile of families interviewed by Luka monitors	113
Table 12:	Total monthly family income for interviewed families	114
Table 13:	Respiratory health issues in the Luka community	114
Table 14:	Problems attributed to mining by families interviewed by Luka monitors	115

LIST OF FIGURES

Figure 1:	A model of acculturation	25
Figure 2:	The three aspects of personality	26
Figure 3:	Map showing the Bojanala District in the North West province	29
Figure 4:	Where platinum is found in South Afria	29
Figure 5:	Graph showing unemployment by municipality in Bojanala District	30
Figure 6:	Graph showing employment status by age group in Bojanala District	31
Figure 7:	Anglo Platinum: Female employees by race and occupational level	48
Figure 8:	Anglo Platinum: Breakdown by occupational level and race of	
	male employees	49
Figure 9:	Geographical spread of public investors in BRPL in 2010	104

LIST OF PHOTOS

Photo 1:	Community research participants in Marikana	20
Photo 2:	Complete disregard for the living space of local communities	37
Photo 3:	'Blikkiesdorp' for relocated farm workers in Marikana	37
Photo 4:	Current housing stock in villages and townships is being ripped apart	by
	blasting and tremors	38
Photo 5:	An Anglo Platinum CSR board in Chaneng	55
Photo 6:	Wall-less, door less toilets in a Chaneng School	55
Photo 7:	Impala platinum billboard advertising paved road in Chaneng	65
Photo 8:	Impala Platinum ore train running up and down a line that has nume	rous
	unguarded rail/road crossings	66
Photo 9:	One of many unguarded/unbridged rail crossing affecting L	uka,
	Rasimone and Chaneng	67
Photo 10:	One of several sewage spills in RDP village next to Lonmin Karee m	nine,
	Marikana	73
Photo 11:	Case history file for child chronically ill from sewage spill next to	her
	house, Marikana	74
Photo 12:	Lonmin CSR signage at school with asbestos classroom blocks	75
Photo 13:	Asbestos classroom blocks, Marikana	75
Photo 14:	Unguarded rail crossing, Marikana	75
Photo 15:	Failed multi-million rans Lonmin hydroponics project	76
Photo 16:	Abandoned multi-million CSR project in ruins	77
Photo 17:	Ruined Lonmin CSR project	77
Photo 18:	Ruins of farms are plentiful around Marikana as agriculture retr	eats
	before mining	79
Photo 19:	Ikemeleng informal settlement	98
Photo 20:	Ikemeleng typical housing for subcontractor workers	99
Photo 21:	Prospecting marker: SD212 Styldrift mine with remaining grave	e of
	community burial site in the background	110

LIST OF BOXES

Box 1:	Road Map: Rustenburg Review and Community Action Res	search
	Programme	21
Box 2:	Anglo Platinum in its own words	43
Box 3:	Anglo Platinum's Community Empowerment project in the Media	53
Box 4:	Impala Platinum in its own words	59
Box 5:	Lonmin Platinum in its own words	70
Box 6:	Xstrata in its own words	82
Box 7:	Xstrata Coal South Africa accused of sacking HIV-positive miners	87
Box 8:	Aquarius Platinum Ltd in its own words	89
Box 9:	Xenophobic wars: remarks by Ikemeleng resident	100
Box 10:	Royal Bafokeng in its own words	102
Box 11:	The Bafokeng Land Buyers Association in its own words	109
Box 12:	Mine promises and corporate social responsibility is a lie	121
Box 13:	How to balance corporate personalities	121

Acronyms and Abbreviations

ABET	Adult Basic Education and Training
ALSA	Affordable Life Solutions for Africa
Amplats	Anglo Platinum
ASX	Australian Stock Exchange
ATCOM	Arthur Taylor Colliery Opencast Mine
BEE	Black Economic Empowerment
BIC	Bushveld Igneous Complex
BLBA	Bafokeng Land Buyers Association
BMF	Bench Marks Foundation
BRPM JV	Bafokeng Rasimone Mine Joint Venture
СВО	Community Based Organisation
CC	Corporate Citizenship
CCMA	Commission for Concilliation Mediation and Arbitration
CEO	Chief Executive Officer
CFMEU	Construction, Forestry, Mining and Energy Union (Australia).
COSATU	Congress of South African Trade Unions
CSI	Corporate Social Investment
CSR	Corporate Social Responsibility
CV	Curriculum Vitae
DMR	Department of Mineral Resources
EIAs	Environmental Impact Assessments
EMP	Environmental Management Plan
FBO	Faith Based Organisation
FPIC	Free Prior and Informed Consent
FY	Financial Year
GLC	Greater Lonmin Community
HDSA	Historically Disadvantaged South Africans
HEPS	Headline Earnings per Share
HR	Human Resources
IDP	Integrated Development Plan
ILO	International Labour Organisation
Implats	Impala Platinum
IOM	International Organisation on Migration

ISO	International Standards Organisation
JSE	Johannesburg Stock exchange
JVs	Joint Ventures
LSE	London Stock Exchange
LTIFR	Lost Time Injury Frequency Rate
MPRDA	Minerals and Petroleum Resources Development Act
NEHAWU	National Education, Health and Allied Workers Union
NGO	Non Governmental Organisation
NUM	National Union of Mine Workers
NWP	North West Province
NWU	North-West University
OECD	Organization for Economic Cooperation and Development
PAR	Participatory Action Research
PGMs	Platinum Group Metals
PLC	Public Limited Company
RBA	Royal Bafokeng Administration
RBH	Royal Bafokeng Holdings
RBN	Royal Bafokeng Nation
RBPL	Royal Bafokeng Platinum Limited
RBPLAT	Royal Bafokeng Platinum
RDP	Reconstruction and Development Programme
SABC	South African Broadcasting Corporation
SADC	Southern African Development Community
SD	Styl Drift
SIAs	Social Impact Assessments
SLP	Social and Labour Plan
SMME	Small Micro and Medium Enterprises
TEBA	The Employment Bureau of Africa
VCR	Voluntary Counselling and Testing
Zimplats	Zimbabwe Platinum

Acknowledgements

The **Bench Marks Foundation** wishes to acknowledge the following contributing organisations, entities and individuals:

The lead researcher, David van Wyk, for his tireless work.

All the participating communities; without whose input this report would not have been possible: the Chaneng Youth Organisation; Mafenya Youth organisation; Marikana Development Organisation; Enviro Kids; Ikemeleng Environment Organisation; Luka Environmental Forum; and the Tlhabane Youth Organisation.

In Mafenya, we would particularly like to thank Kagiso Padi, Thabo Mathulwe, Lesego Mabe, Katlego Mpudi, Olga Mathulwe; in the Luka community: Hassan Mekgwe, Phistus Mekgwe, Frans Mathipa, Tlhapane Mekgwe, Lucas Mekgwe; in Tlhabane: Christinah Mogodiri, Lebogang Mabele, Snoop Raikane, Debrah Kgatlhane and Rapula Kedige. In the Chaneng community we would particularly like to thank Chris Senne, Makhuduga Mokuwa, Keneiloe Letupu, Lesego Motene, Gabi Montsho; in Marikana: Chris Molebatsi, Thulisile Nkabinde, Nhlanhla Menzikuhle, Alex Salang, Mmathapelo Moamogwa and in Ikemeleng: Pule Shawe, Norman Thobedi, Phindile Ngobeni, Mothusi Kok, and Tsholefelang Kokwe.

Mining companies that provided valuable information to the research team include Anglo Platinum, Impala Platinum, Lonmin, Xstrata, Aquarius and the Royal Bafokeng Platinum Limited.

We would also like to thank the following people for their contributions and comments at the Bench Marks Foundation: John Capel, Moses Cloete, Hassen Lorgat, Bobby Marie, Joseph Magobe, Eric Mokuoa, Brown Motsau, Simo Gumede and Maria Dyveke Styve. We also thank Cameron Jacobs at the SAHRC, and Piet Beukes, board member of the Bench Marks Foundation.

We thank the Bench Marks Centre for CSR at the North-West University, for the use of researchers and their pivotal role in the study conducted. We would especially like to thank David van Wyk, Prof. Freek Cronjé, Dr. Charity Chenga, Doret Botha, Suzanne Reyneke and Prof. Eric Nealer.

This study would not have been possible without the support of our core funders and partners: Christian Aid, EED (Evangelischer Entwicklungsdienst), Diakonia Sweden, ICCO KerkinActie (Interkerkelijke Organisatie voor Ontwikkelingssamenwerking) and Norwegian Church Aid.

The Bench Marks Foundation

The Bench Marks Foundation is an independent non-governmental organisation that aims to ensure that the operations of big corporations do not in any way undermine community life or destroy the environment. The Bench Marks Foundation is mandated by the churches to monitor the practices of multinational corporations to ensure they respect human rights, operate in a way that protects the environment and do not externalise costs; that profit making is not done at the expense of other interest groups and that those most negatively impacted upon are heard, protected and accommodated. The Bench Marks Foundation's concern is that private corporations, often with the support of government leaders, make very large profits while communities suffer high levels of inequality and poverty. The Bench Marks Foundation is equally concerned about the destruction of our air, water and soil resources that results from industrial activities such as mining.

The Bench Marks Foundation conducts research that is used to monitor multinational corporations. It works with local communities and networks to support them in engaging on a more level footing with multinational corporations and governments to bring about change in their practises. The Bench Marks Foundation promotes public awareness through media outlets, websites, blogs and Facebook. The Bench Marks Foundation further works to promote ideas on what constitutes good investment and corporate practice, and encourages the church and other religious leaders to become more active in promoting responsible corporate investments.

The Bench Marks Foundation was set up by The South African Council of Churches (SACC), the Ecumenical Service for Socio–Economic Transformation (ESSET), Industrial Mission of South Africa, CDT Foundation and the Justice and Peace Department of the South African Catholic Bishops Conference. Archbishop Desmond Tutu launched the Foundation in 2001 and an office was established in 2003 in Johannesburg. The Rt. Rev Dr Jo Seoka chairs the organisation and is the founding chairperson of the Foundation. The Bench Marks Foundation works with research, NGOs, religious and community organisations across the Southern African Development Community. Its international partners are:

- The Interfaith Centre on Corporate Responsibility (ICCR)-USA
- The Taskforce on Churches & Corporate Responsibility (TCCR) Canada
- The Ecumenical Council for Corporate Responsibility-UK
- The Christian Centre for Socially Responsible Investment- Australia

Together with our international partners we share a measurement instrument called the *Bench Marks, Principles for Global Corporate Responsibility – Bench Marks for Measuring Business Performance*. This is a comprehensive set of social, economic and environmental criteria and business performance indicators drawn from a body of internationally recognised human rights, labour and environmental standards and principles. These principles form an important basis for the research conducted by the Bench Marks Foundation, and are used to monitor the multinational corporations.

Foreword

Once again I am pleased to release this research study on platinum mining in the North West Province in the Bojanala District. In 2007 the Bench Marks Foundation released a study on platinum mining in the North West Province (Rustenburg) called the *Policy Gap*, hereinafter referred to as Policy Gap 1, in which we made a number of recommendations to Anglo Platinum, Impala Platinum, Lonmin and Xstrata on how to improve their social, economic and environmental performance within the framework of corporate social responsibility.

In 2011, *Policy Gap* 1 was revisited to review whether there had been any changes in the behavior of these corporations with regards to communities, and whether the mining houses had taken up any of the recommendations from the Bench Marks Foundation. The recommendations were centered on reducing the negative impacts on the environment, air and water quality and dealt with land concerns, and creating sustainable economic practices. Recommendations were further made for the companies to deal with labour issues, the living-out allowance, subcontracting and HIV and Aids, both in the workplace and in the surrounding communities.

We start from the assumption that management and investors will not voluntarily act in the interest of society and the environment, and believe that this is a correct assumption. We believe that the starting point of economic life begins with communities, and so we want to know how those directly impacted upon, benefit from mining.

To do our studies we use as our basis, the *Principles for Global Corporate Responsibility - Bench Marks for Measuring Business Performance*. The global Bench Marks Principles have been formulated by a number of faith-based organisations and non-governmental organisations from around the globe on what civil society considers constitutes responsible business behaviour. It is a tool which different organisations can use to implement meaningful economic, social and environmental sustainability. It is designed to help groups to move from an articulation of values to a set of principles, to concrete points of dialogue and to action.

Overarching principles the Bench Marks research instrument calls for:

- A sustainable system of production and distribution.
- Preservation of the broader and social environment for present and future generations.
- A more equitable system for the distribution of economic benefits.
- Stakeholder participation, especially those most affected and exploited by companies' operations.
- The promotion of life and freedom for all humanity.

This review was done with our Community Monitoring School, and six organised communities participating in the research process. The community monitors engaged with their communities and collected information on various issues affecting

them. This was a pivotal part of the research, and was also put together in a separate community report.

This study also involved our Bench Marks Centre for Corporate Social Responsibility at the North-West University, and the outcome we hope will assist not only corporations to improve their social responsibility actions, but also empower communities to engage with the mining houses on a more level footing.

Overall, we have seen very little improvement in the performance of the companies surveyed on corporate social responsibility. What we have seen, is a large increase in corporate advertising, large spreads in newspapers and billboards stating how responsible mining is, in particular by Anglo Platinum. Instead, all the companies reviewed here should respond to community concerns over jobs, health care and a safe and healthy environment.

Once again we have to report that all the companies surveyed, although participating in the research, have failed on a whole to meet the *Principles for Global Corporate Responsibility - Bench Marks for Measuring Business Performance*.

Rt Rev Dr. Jo Seoka- Chairperson, the Bench Marks Foundation

Preface

The Bench Marks Foundation's aim is to change corporate behaviour towards responsible business conduct – conduct that benefits communities and enhances the overall wellbeing of those most negatively impacted upon. We have a particular concern with how women are impacted upon and how mining contributes to the spread of HIV and AIDS. Women suffer livelihood losses, marginalisation and loss of identity and both directly and indirectly bear the consequences of mining operations.

We still cannot see how mining communities benefit. Yet we read these mining houses' sustainability reports and see they talk of building clinics and schools, but these projects seem to make little difference to the impacts on communities' wellbeing. Mines seem not to care about water impacts that cause health and livelihood problems, air quality issues that lead to respiratory problems or the overall development of communities on whose land they operate.

We note all the talk in company sustainability reports to society that project these companies as being exemplary in their operations. What we realise is that for the mining companies surveyed their Corporate Social Responsibility is more strategic interventions to look good. This is based on how they want the public and investors to perceive them. But behind this is their private image, one of pursuing profits more often than not at a cost to other people, mainly communities nearby or downstream. We focus on the experienced reality of communities and find that what the mining houses in Bojanala District in the North West Province say on paper does not really translate into meaningful practices by the said corporations.

We hope that the mining corporations under review will dissect this study to improve how they conduct their business operations and engage with the Bench Marks Foundation and communities on the research findings. We also hope that decision makers, the South African government, ethical investors and think-tank organisations will use the findings to ensure mining is done more responsibly.

We need to be aware of the win-win solution propagated by many, when in fact we have winners and losers, and the losers, communities and specifically women tend to carry the costs of mining that are externalised onto them.

I can only hope that this report will shake up the mining industry and that the issues raised will be on every mining company's agenda.

John Capel - Executive Director Bench Marks Foundation

Executive summary

In 2007 the Bench Marks Foundation published Policy Gap 1, looking at the impacts on local communities from platinum mining in the North West province. The findings showed that despite the great value extracted from platinum mining, there are harmful social, economic and environmental impacts on local communities, and the mining companies have yet to assume their responsibility for the negative consequences of their mining activities. This report revisits the initial one to look at what changes have taken place, and further aims to investigate the perceptions that local communities have of mining companies to evaluate the corporate personalities of these companies. In order to increase the participation of local communities, participatory action research was chosen as a methodology.

The corporations surveyed in Policy Gap 6 include Anglo Platinum, Impala Platinum, Lonmin, Xstrata, Aquarius and Royal Bafokeng Platinum Limited. Although they all have corporate social responsibility programmes in place, the overall findings of this study show that they all fail to meet the standards of the *Principles for Global Corporate Responsibility - Bench Marks for Measuring Business Performance*.

For **Anglo Platinum**, the study finds that despite making headways in achieving the goals set by the MPRDA related to the employment of historically disadvantaged South Africans (HDSAs), the employment of women and increasing HDSA procurement, significant challenges remain. While it is positive that Anglo Platinum has improved the number of HSDAs in management positions, the company still needs to do a lot more for its employment profile to be reflective of South African demographics. The increase in the number of employed women is also positive, but must be accompanied by a transformation of the workplace culture to accommodate female workers and provide them with a safe working environment. The study also expresses concerns around Anglo Platinum's two CSR-projects to provide employees with houses and for communities to buy shares in Anglo Platinum.

When it comes to environmental impacts, Anglo Platinum itself admits to exceeding permitted emission levels of sulphur dioxide (SO₂) and harmful impacts on water resources in the area. The Bench Marks Foundation is concerned that the corporation reports only a 63% compliance with 688 conditions requiring legal compliance. Anglo Platinum must take immediate steps to comply with legal requirements and set emission limits.

The main issues concerning **Impala Platinum** (Implat) include high levels of fatalities at its operations, extensive use of sub-contracted labour, and damaging environmental impacts. The levels of fatalities are unacceptably high, and must be seen in connection with the push for cost containment, the use of subcontracting and the low levels of worker literacy. Impala Platinum has increased the number of subcontractors it employs, and subcontracted labour is often poorly paid and poorly accommodated. Further, the lack of employment opportunities given to local youth is creating tension with the surrounding communities. Impala Platinum should further show greater concern for public safety in the communities surrounding the mine, by

immediately setting up proper booms and bridges at the rail crossings that are now unquarded.

In terms of environmental impacts, emission levels of SO_2 and CO_2 are too high at Impala Platinum's Rustenburg operations. For CO_2 emissions, the Rustenburg operations account for over 70% of all of Implat's CO_2 emissions. This means that the communities of the Bojanala District are bearing the heaviest burden of air pollution of all of Implat's operations in Southern Africa.

Regarding **Lonmin's** operations some of the key problems highlighted by the report include a high level of fatalities, very poor living conditions for workers, community demands for employment opportunities and the impacts of mining on commercial farming in the area. Almost a third of Lonmin's workforce is contracted labour, and community demands for employment have lead to protests and unrest. The company was also in a union dispute, after which Lonmin dismissed 9 000 workers at the Marikana operations.

Commercial farming in the Marikana area has been negatively impacted upon by the mining activities here. As the mines buy more land, the farms that remain become isolated, and suffer under the environmental impacts of mining on the quality of the water sources in the area.

One of the key challenges when assessing **Xstrata's** CSR-programmes is that the company's sustainable development report covers all its operations across the world, without breaking down the report to specific country levels. This makes it very difficult to obtain a clear picture of Xstrata's CSR programme in the Bojanala District of the North West Province specifically.

However, some major concerns were raised by local communities regarding how Xstrata deals with HIV/AIDS and local employment. In February 2011 the National Union of Mineworkers (NUM) alleged that Xstrata was firing workers on the grounds of their HIV/AIDS status from one of its South African collieries. This is despite Xstrata's claims of providing extensive HIV/AIDS programmes for its workers. This incident led to Xstrata employees fearing to be tested and treated at the mine's health facilities, and instead going to government facilities. These government facilities have then become overstrained, leading to tensions with local residents over access to health facilities.

Another source of tension between the local community and Xstrata is the perception among local residents that Xstrata is heavily reliant on contract workers from outside the local communities. This is despite Xstrata's claim to employ most of its workforce locally.

Policy Gap 1 in 2007 found poor environmental management of water and waste behind Xstrata's operations, but the current report shows a significant improvement on this point.

For **Aquarius** the issue of local employment is also a source of tension with the local communities. Aquarius claims to have a minimum of 51% employed from the local communities, defined as people living within 50km radius of the mine's operations. However, such a definition includes migrant labourers who are living in local communities, and so continues to be a source of tension. Further, Aquarius has a very heavy reliance on sub-contracting, employing 9 434 workers as subcontracted labour out of a total of 11 072 employees. The living-out allowance given to workers is linked to increases in informal settlements, a problem raised in the report in relation to most of the companies surveyed. Finally, the report highlighted some of the problematic issues relating to Savannah Resources Consortium's shares in Aquarius, given the links of this BEE consortium to people with high-level political connections.

Royal Bafokeng Platinum Limited is the final company surveyed in Policy Gap 6. One of the key issues raised, especially in Luka and Chaneng, is the contested ownership of land. The Bafokeng Land Buyers Association was established to contest the claim of the Royal Bafokeng Authority that all the land was purchased by it as a single entity. Not only are the people of Chaneng contesting the land question, but they are also demanding a 30% ownership state in the Styldrift mine as compensation for having given up their land for its development. More tension is created by the lack of employment opportunities for local youth, as workers are sourced from outside of the local communities. Another issue that can lead to increased tension with the surrounding communities is the illegal desecration of graves in the prospecting for the new Styldrift mine.

In conclusion, the companies surveyed in Policy Gap 6 have a long way to go to deal with the negative impacts of their operations on local communities in the Bojanala District and to meet the standards of the *Principles for Global Corporate Responsibility - Bench Marks for Measuring Business Performance*.

Contextualised Quotes

Mine manager: "Our relationship with the community is like a marriage, we must not get third parties to spoil our relationship, when there are problems in a relationship we must try and resolve them. The government through its intervention is acting like a marriage councillor, but we must resolve our issues ourselves."

Community member: "This marriage you are referring to is problematic, because we woke up one morning in 2008 to find this mining company in our bed, we were violated because there was no consultation, it was sex without consent – it was rape."

Mine HR manager: Hau bana, there is nothing like rape in traditional weddings or marriage, the wife has to do what the husband wants...."
[Joking banter which took place during a break in conflict resolution discussions between a mining company and a community in the Bojanala District]

"Africa is lying ready for us. It is our duty to take it" - Cecil John Rhodes, mining magnate and prime minister of the Cape Colony (Thomas, 1996, p. 134)

1. INTRODUCTION

1.1 Background

In 2007 the Bench Marks Foundation launched the first report of the Policy Gap series, hereinafter referred to as Policy Gap 1. The study examined the Corporate Social Responsibility programmes of the platinum mining industry in the North West Province, and made a number of strong findings. *Annexure 1* reflects the comparison between the main findings of Policy Gap 1 and this report (Policy Gap 6).

The study found a lack of substantial engagement from the mining companies with local communities. Social plans required by the Mineral and Petroleum Resources Development Act (MPRDA) and Mining Charter are not made public, making it difficult for local communities to engage directly with these. Mining companies tend to focus their contributions on the construction of clinics and classrooms, or housing, but fail to deal with the environmental, economic, social and health impacts that mining operations have on local communities. This shows a reluctance to take responsibility for the impact of mining.

Further, communities in the Rustenburg area of the North West Province are affected by the CO_2 and SO_2 emissions associated with the increasing number of platinum smelters in the area. These emissions also give rise to acid rain, with a harmful impact on farming activities. Water sources are also being contaminated by both mining activities and the waste produced by informal settlements without access to waste removal and sewage systems. The locations of the informal settlements are closely linked to those of the platinum mines.

The health impact of mining includes a high level of respiratory infections linked to the pollution in the area, and a high rate of HIV/AIDS infections. The increase in HIV/AIDS must be seen in connection with the influx of migrant labour to the mines, the policy of subcontracting, the living-out allowance and the lack of job opportunities for women in the area, who then resort to sex work as a source of income.

Local communities in the Rustenburg area have yet to benefit from the mining operations, as unemployment and poverty levels remain high. The lack of job opportunities must be seen in conjunction with the tendency of mining companies to

use migrant labour instead of training workers from the local communities. The policies of subcontracting and outsourcing are not resulting in local procurement and economic development. Furthermore, there is a strong gender bias in the industry, with a lack of employment opportunities for women.

In general, the mining corporations do not provide levels of environmental, income, health and safety standards equal to that of their operations in North America, Europe or Australia.

In 2011, the Bench Marks Foundation decided that it was appropriate to review Policy Gap 1 to assess the situation anew. However, seeing the huge impact mining operations have on communities, the decision was made to give mine-affected communities a far greater voice in this second report. Since the publication of the first report, the Bench Marks Foundation has attempted to train community monitors to become the 'eyes and ears' of the community, in terms of observing and understanding the impact of mining and to speak, write about and report on mining and community issues (Bench Marks Foundation, 2007).

The first report was intended to raise local, national and international awareness about the impact of platinum mining on the environment, the local economy, health and safety of both workers and the community, local culture and society and even on the political reality. This review is different from Policy Gap 1, in that it will take the form of an action research process, where local communities co-execute the research. A fuller description of this methodology will follow (see *Point 2*); however, very briefly, action research involves the community more directly and represents research, not on the community, but with the community.

What is common to both reports is the reliance of both researchers and communities on the Bench Marks Foundation's policy document, *Principles for Global Corporate Responsibility: Bench Marks for Measuring Business Performance* (Bench Marks Foundation, 2003). The questionnaires that were sent to mining corporations, as well as the action research process, were informed by this seminal document. The principles cover a wide range of areas in which to measure corporate social responsibility. For the wider community the principles include the areas of

ecosystems, impacts on national, local and indigenous communities and resource extraction.

Relating to the corporate business community, the principles cover working conditions and health and safety for the employed and the conditions for a variety of worker groups. Furthermore, it covers issues related to suppliers, financial and ethical integrity, corporate governance, shareholders, joint ventures, customers and consumers. The principles measure the impact a corporation has on the environment, its workers, local communities and the dignity of the people it affects.

The reader should be mindful that the entire research process was collective involving senior staff at the Bench Marks Foundation, researchers from the North-West University, monitors and members of communities, as the methodological section will show. The end product cannot therefore be ascribed to a single author, but as the product of all those who contributed.

1.2 Objectives

The research aimed to achieve the following objectives:

- To analyse the corporate personalities of the extractive firms in the area according to the perceptions of local communities. This analysis is based on the Bench Marks Foundation's policy document, *Principles for Global Corporate Responsibility: Bench Marks for Measuring Business Performance* (Bench Marks Foundation, 2003);
- To review the Bench Marks Foundation's Policy Gap 1 publication to determine whether the situation has changed since 2007. In addition to a review using a participatory action research (PAR) methodology, a review was also done in a quantitative way through questionnaires filled in by mining companies, based on the Bench Marks Foundation's policy document, *Principles for Global Corporate Responsibility: Bench Marks for Measuring Business Performance* (Bench Marks Foundation, 2003);
- To employ the PAR approach as guidance for the methodology to increase the participation of communities and develop community capacity to monitor mining operations in their area; and

 To solicit the views of the corporations under review by means of questionnaires based on the Bench Marks Principles for Global Corporate Responsibility, as well as through a review of corporate literature such as annual reports, reports to society and media reports.

2. RESEARCH METHODOLOGY

2.1 Research locus

The research was mainly focussed on the Bojanala District of the North West Province of South Africa (see Point 4). The Bojanala District includes the towns of Brits, Broederstroom, Derby, Hartebeespoortdam, Koster, Kroondal, Maanhaarsrand, Magaliesburg, Phokeng, Rustenburg and Swartruggens. Kroondal, Phokeng and Rustenburg fall directly within the scope of the study, which also includes the lesser towns of Marikana, Mooinooi and Tlhabane; and the villages of Luka / Mafenya and Chaneng (in Phokeng) and the informal settlement of Ikemeleng next to Kroondal.

Consequently, an overview of PAR as well as limitations of the approach will be given.

2.2 Participatory Action Research (PAR)

Prozesky and Mouton (2001, p. 537) define PAR as an activity in research which is used to serve the ends to empowerment, conscientisation and emancipation in development. Participation means that the research subjects control and own as many aspects of the research activity as possible and participate actively in all phases of the process. PAR is one of the most widely used research approaches that is characterised by a participatory element.

The approach is commonly used in underprivileged, poor rural settings in 'Third World' countries and research settings, like the relevant area in this study (important to note, PAR excludes elites!). It is characterised by the strong involvement and degree of participation of members of the public in the research process. PAR is explicitly designed to lead to social actions and change (see Babbie & Mouton, 2001).

The specific aims of PAR are to:

- Stimulate actions which are useful to participants by leading to improvement in their situation and induce positive transformation;
- Transform the physical environment and economic conditions as well as the participants' overall quality of life; and
- Develop self-reliance among the participants and involve the development of freedom and democracy in a general and political sense.

PAR can thus be considered as a learning strategy aimed at empowering participants, which is a continual concept. As already indicated, it is not research done on people and does not treat people as objects for research, but rather as research subjects. PAR is more likely to meet participants' needs and be compatible with cultural values and it encourages them to apply what they have learned. All participants in PAR should be equal and learn and teach together; local knowledge, wisdom and expertise of participants are highly respected and valued in this approach. The merge of local and academic knowledge is another strength of the approach and leads to a much more accurate picture and deeper understanding of a research setting.

PAR is more than often multi-disciplinary because of its problem solving nature and has a preference to qualitative research, because it uses methods developed from anthropological and social traditions (peer interviews, group interviews and field notes). PAR may however also use data collecting methods that are quantitative in the form of surveys or census (for example Treasury Reports). Participants within a PAR paradigm have been found to work better in groups or workshops. Numerous workshops with community representatives were held during the research period for this Review (starting in February 2011) in order to get the PAR process underway.

Qualitative research in general and PAR specifically, definitely also have some limitations (see Sarantakos, 2005 p. 45), and the authors - to be balanced in the execution of the research - acknowledge some of the most dominant and common points of critique in this regard. In general, an inability exists within qualitative and PAR paradigms to study relationships between variables with the accuracy to establish social trends. This kind of research and studies are normally based on

small samples and does not produce fully representative results; because of this, their findings cannot be generalised, and are thus restricted only to the relevant research setting. Critics of this approach more than often question the objectivity of these methodologies, thus the quality of the findings might be questionable.

Furthermore, no exact and precise quality assurance exists to ensure that the researcher fully and correctly captures the true meanings and interpretations of the respondents; hence the concepts of validity and reliability might also be tentative. Qualitative studies also do not produce data that allow comparisons; therefore replicability of the exact research structure is not possible. In the last instance, close contact with respondents (through the repeated workshops, etc.) can lead to ethical problems.

Having shed some light on the positives and possible limitations of a qualitative and PAR approach, it is consequently important to view the study methodologically in context. Firstly, PAR was applied to counter some of the research fatigue of people and communities in the area, by actively involving the communities in an alternative research process, with some specific outcomes in mind (see description of PAR). In the second instance, one of the main aims (see Objectives, Point 1.2) of the project was to give the results and findings a 'personal voice'. Furthermore, the results were mirrored (triangulated) – as far as possible – against Policy Gap 1, as well as against earlier research on stakeholder perceptions in the very same area (see Cronjé et al., 2005), where some of the data in the earlier study was based on quantitative inquiry. In an inductive way, the gathered data was also re-contextualised by applicable literature (a basic prerequisite for validity in qualitative research). Lastly, the Report simply aims to convey a scientific message (the findings) through a somewhat alternative methodological paradigm.

2.3 PAR research process

The starting point of the whole process was to initiate and stimulate communication and awareness regarding the broad research focus through workshops and group discussions. Towards this end, the Bench Marks Foundation created a start up team consisting of Bobbie Marie, David van Wyk and Eric Mokuoa as initiators, and Joseph Magobe as overall community coordinator in Rustenburg. This team later

included key community participants, with monitors from Luka, Chaneng, Tlhabane, Ikemeleng and Marikana, and academics and students from the North-West University, including Prof. Freek Cronjé, Dr. Charity Chenga and Mrs. Doret Botha. In this way a balance was achieved between academic rigour and the space for community voices to come through.

It should be noted that the purpose of the research is not merely to produce yet another report, but to develop a community intervention strategy to address the imbalance of power that exists between communities and corporations in the Rustenburg area. In Policy Gap 1, it was found that this imbalance results from the fact that corporations - through their wealth and resources - have access to academic, judicial and legislative power and knowledge; that knowledge is in fact power (Foucault, 1994). Working with communities, this research aims to evolve a road map for community action and intervention, to engage with corporations and government to effectively address the challenges faced by communities as a result of mining.

Due to the specific focus of the research, it must also be noted that government was not directly included in the inquiry, although recommendations were made to government at the end of the process.

Unlike Policy Gap 1, this research is not merely an evaluation of the Corporate Social Responsibility (CSR) programmes of the various mines operating in Rustenburg. CSR reports represent but one face of corporate personality, their public personality, which is how they wish to be viewed by the public (Babiak & Hare, 2007, p. 71). CSR therefore represents corporate impression management that is managing our perceptions of them. This research is focused on the way communities view and experience mining corporations, in other words, the impressions that communities have of mining corporations. The research proceeds from the assumption that if corporations are attributed legal persona, they may sue or be sued, then corporate behaviour may also be evaluated in terms of psychological personality traits. This means that ordinary citizens may hold corporate citizens not only legally accountable, but also socially responsible (also see Point 3). This research therefore turns CSR on its head. It is no longer a matter of corporates

managing public perceptions, but of the public managing corporate behaviour and holding corporations accountable for their actions. We are no longer talking of **communities in mining** but of **mining in communities**.

The following issues were carefully considered at the start of the process:

- The way in which the space and style of discussions were shaped;
- The language being used, for example definition of problems, opportunities and resources;
- How to identify the geographical research area and the resources available to do the work; and
- The preliminary identification of the social actors who will participate in the action research.

As the social actors became involved, they brought refinement to both the process and the outcomes in defining, understanding and deciding on the actions to take.

After solidarity, cohesion and rapport were established in the workshops, groups and through numerous discussions and briefings, the community collective was involved and fully responsible for the rest of the process. The most important phases in the research process were:

- Problem formulation
- Planning of the project design
- Implementing and monitoring
- Reaching final conclusions
- Communication of results
- Review and reflection
- Generating problem solutions and applying research outcomes and assessment of the results
- Validation of the findings (Babbie & Mouton, 2001, pp 315-316)

In addition, all the mining companies under review were sent questionnaires to complete; these documents were used in conjunction with annual reports and other company documents to understand the corporate perspective on the issues under review. The Bench Marks Foundation wishes to express its gratitude to all the

corporations for responding to the questionnaires. The mining corporations observed were Anglo Platinum, Impala Platinum, Royal Bafokeng Mines, Aquarius, Xtrata and Lonmin.

2.4 First and Second Phase: The self-perception (private image) and the public image of the corporations

The intention of this research (see Objectives, Point 1.2) is to determine the kind of personality traits that platinum group metal mining corporations, operating in the Bojanala District around the town of Rustenburg in South Africa, display. This assessment was conducted and guided through the PAR process. Generally, the process involved workshops, focus groups and discussions within the broader research collective (communities), interviews with current and former employees, and, in addition, assessing documents and literature internal to each corporation. Each corporation was also requested to complete an assessment questionnaire. Anglo Platinum (Angloplat) and Impala Platinum (Implats), Xstrata and Lonmin (Lonplats) responded to the questionnaire which is a significant improvement on the response obtained from Policy Gap 1. The questionnaires were structured around the Bench Marks Foundation's policy document, *Principles for Global Corporate Responsibility: Bench Marks for Measuring Business Performance* (Bench Marks Foundation, 2003).

The **self-perception** (private image) of companies is in most cases mainly reflected by the views of management, as well as by vision and mission statements about how it perceives itself. Despite 'honest' and 'noble' beliefs and statements, the following 'private behaviour' may occur in companies: cutting costs and producing substandard products, not paying employees a living wage, providing not totally accurate information to shareholders, subtle transgressing laws and regulations and nepotism, etc.

The research teams' impression of the **public image** was informed by the PAR collective as well as by analysing statements to the media, advertising and the reports to society/sustainability reports of each company. The corporate's public image is the image the corporation seeks to portray to the general public, through advertising and public relations exercises. Despite the clichéd shibboleth of neo-

liberal economics that corporations and entrepreneurs are risk takers, it is the experience of the Bench Marks Foundation that most companies are risk averse and mostly seek to minimise or avoid risk.

Most corporations fear bad publicity and they fear the impact of bad publicity on their brand. Union Carbide for example, suffered massive negative impact after the Bhopal gas disaster of 1984 in which 3 787 people died within weeks as a result of a toxic gas leak from a pesticide plant and more than 8 000 have since died from gas related illnesses. So bad were the consequences that Union Carbide eventually sold the plant, but the corporation is still suffering from the consequences. The impact of the disaster could perhaps have been mitigated if the communities around Bhopal had been given more information about the environmental, health and safety risks associated with the plant, had been informed about disaster management procedures, and had been represented on the disaster management committee of the corporation.

In the asbestosis case involving the British multinational corporation Cape PLC, 3 000 asbestos victims (employees and members of the community) were affected by the inhalation of asbestos dust. This was not a once-off disaster, but people becoming ill over a prolonged period of time. In either case, greater community awareness, better community organisation, better community access to information and knowledge and a better more even balance of power between the community and the corporate could have averted disaster and saved lives.

Whereas Joel Bakan (2004) considers all corporations psychopathic, the Bench Marks Foundation believes that there are variations in corporate personalities and such variations are worth investigating. The Bench Marks Foundation believes that corporate behavioural change is possible through engaging them in discussion, through social sanction, civic pressure and better governance and regulation; hence the need for research projects like this.

In order to complete the picture of the three aspects of personality, it was necessary to solicit the perceptions of the communities impacted by mining, to get a sense of how they 'experienced' the corporations under review. The PAR process again formed the basis of this investigation.

2.5 Third Phase: The experienced/reputational personalities of the corporations under review

The community action research took place in six communities, three traditional villages (Luka, Chaneng and Mafenya), one township (Tlhabane), one informal settlement (Ikemeleng), and one former farming centre, now mining frontier town (Marikana).

The main aim of the community action research is to stimulate these communities into action around issues relating to the impact of mining. Through the process capacity can be built for activism with and in the identified communities, from the understanding that democracy is a process of deepening the active participation of the direction and of ordinary people in control their own (Davidson, 1977, pp 27 - 31). It is expected that the research process will help communities to realise and become aware of their own strengths and rights within the law, what gains can be realised through these strengths and what obligations they have towards their fellow villagers, the environment and future generations. It is therefore incumbent upon communities to hold mining corporations accountable and responsible for the potential benefits that communities may derive from mining activities by corporations, and more importantly for the actual and potential negative impacts or costs to society of such activities.

The aim is further to assist the transformation of communities perceived to be passive victims of corporate impact to active champions of the cause of good governance, responsible environmental impact management, and effective economic and commercial engagement with mining corporations towards realising the best possible agreements for the community.

The relevance and importance of this type of research is underlined by the fact that in the months September to November 2011, there have been outbursts of community protests in Marikana (against Lonmin), in Chaneng (against the Royal

Bafokeng Mine's Styldrift operation) and in Ikemeleng / Kroondal (against Aquarius and Impala Platinum).

The findings of this section (to reveal the experienced personality of the company through the eyes of the community) will be presented in accordance with the most important 'data gathering tools' for PAR, namely social communication, picture taking, participatory mapping and story writing.

2.5.1 Social communication

Using Borinni-Feyerabend's (Selin *et al.*, 2007, pp 421 – 425) description, the research team identified social communication and social learning as follows: "Communication may be personal (i.e. one-to-one); interpersonal (among a few individuals) which is what standard academic research through surveys, questionnaires and focus groups usually achieve; or social (when it involves groups such as a community). Social communication is about providing the conditions for interactive learning and informed decision making in communities [in this research about mining], thus promoting the sharing of information and the discussion of problems, opportunities and alternative options for action. Interactive learning is critical for co-management of a community action research plan as it attempts to overcome the logic of top-down expert authority and behaviour."

The members of the start-up team already had an awareness of the issues, problems and opportunities that concern various social actors impacted on and affected by mining in the Rustenburg area, having worked with community monitors since 2007. The start-up team also had the benefit of studying Policy Gap 1 and through the work that Bobby Marie and Eric Mokuoa have been doing in the area. However, the team was careful to refrain from discussing technical questions or the best ways to resolve impact problems, or to respond to opportunities for community or NGO action, so as not to prejudice the outcomes of communications between the team and the broader community.

Social communication was important for the research team throughout the research process. One of the team's first objectives with social communication was to inform the representatives of each village about how the team intended to manage the

research process. The management of the action research process was therefore collectively owned and adjusted. The outcome of the entire research process is aimed at promoting a critical understanding and appropriation of the issues by the community. The co-management of the process is not for members of the community to behave in tune with what the 'experts' in the start-up process believe is right for the community, but for community members to think, find agreements and act together on their own accord, which is what is reflected in the action plan and recommendations emanating from the research.

Social communication requires that it is accepted that communication occurs when people have something in common. If we wish to communicate with people we need to understand the language by which they describe their own reality, including fundamental beliefs, values and concepts.

Effective communication processes and tools do not discriminate against the weaker and less influential in society, for example people who do not feel confident enough to attend meetings, who are not literate, who lack transport to get to meetings, or who live far from main centres. The research team realised that due to the complexities of these communities and the imbalances of power that exist between the communities and the mining corporations with high levels of unemployment and poverty, special care had to be taken to avoid discrimination against the weak and less influential. The Bench Marks Foundation often paid for transport, or provided transport and accommodation to participants in the research process.

The research team took also care that any information conveyed should be truthful, fair and reasonably complete. Information depends on context, and decisions are conditioned by the perception of available alternatives. However, community access to information is often hampered by institutions of governance and the mining corporations. Community access to social and labour plans is restricted and community participation in meetings with mining corporations is often misconstrued as community consent.

The demography of each of the identified communities is very different. These communities are in the case of **Luka** and **Chaneng** traditional communities whose

lives have been disrupted first by *Apartheid* and later by mining. In the case of *Apartheid* these communities attempted to protect their land by entering into an agreement with the Lutheran Church. The Church acquired the title deeds of the tribal land on which the communities resided with the understanding that once *Apartheid* was defeated the church would return the land to the communities. However, after the end of *Apartheid* in 1994, the Bafokeng King claimed that the land belonged to the Bafokeng instead of the BaPhiring and other communities who entered into an agreement with the Lutheran Church. The Bafokeng's claim is motivated by its desire to control the mineral wealth of the area through agreements with the mining corporations. The Bafokeng Land Buyer's Association is party to a land claim against the Bafokeng Traditional Authority over the issue of land ownership.

Communities complain that the present agreements between Royal Bafokeng Holdings and the mining corporations suit the mining corporations and the Royal Bafokeng Authority (RBA), while they experience the degradation of their land and environment as a result of mining. In contrast, communities resent the prestige RBA projects such as the World Cup soccer stadium, multiple lane roads to the stadium and the state of the art Bafokeng tribal offices. The RBA seeks to link ethnic identity and authority to corporate interest, seeking to circumvent the post colonial state. This brings out the unresolved issues of different identities imposed by colonialism, where 'natives' were assigned ethnic / traditional identities, their legal personalities trapped within traditional law and authority and a complete denial of political rights and identity in relation to the colonial administration and state which was the preserve of colonists or 'non-natives'.

The *Apartheid* colonial state divided the colonised into 'tribes' and ruled the country by breaking it up into a federation of tribal states or Bantustans. This facilitated a kind of indirect rule and excluded the black majority from civil society and political rights similar to that described by Mamdani (2005, pp 2 - 18). It subjected the black majority to the dual authority of the colonial state and the traditional authority. In the former, there was a clear demarcation between the judiciary, the legislature and the executive. In the latter, judicial, legislative and executive powers all resided in the king, chief or headman, who ruled with an iron fist so long as such rule reinforced

rather than threatened the colonial state. Within each Bantustan there was a further subdivision into sub-tribes; in the case of Bophuthatswana, the Bantustan which was located more or less within the current North West Province, these 'sub tribes' were groupings such as the Batlhaping, the Bafokeng, the Barolong, etc. (Breutz, 1987, pp. 30 - 57). Under *Apartheid* these tribal/ethnic arrangements facilitated the supply of cheap labour as the 'tribal office'; it often became a labour agency/labour broking office for mining or farming capital in South Africa.

Through social communication the research collective also learned about another complicating factor, namely the labour 'import' from elsewhere into the area. Thus Shaft Sinkers, while constructing the Styldrift mine, imported most of its labour from the gold mining town of Welkom. The residents of **Luka**, **Chaneng** and **Mafenya** have responded by providing back-yard shacks to accommodate workers receiving a living-out allowance from mining companies. These villages are also characterised by high levels of youth unemployment.

Within Luka and Chaneng villages there are other significant contrasts within the community. There are for example three different sources of knowledge. Firstly the traditional/tribal/ethnic knowledge that is located in the Kgosi (chief) and Dikgosana (headmen) located on the Kgotla, or community meeting place. Secondly, religious knowledge is located in the church, and most people living there are Christian. Finally, education knowledge resides in the schools (there are many high schools and primary schools) which the mining companies to their credit support in many different ways.

Education potentially represents analytical knowledge, the knowledge to observe, analyse and understand the issues affecting the community. It was also noted earlier that knowledge is potentially power. Thousands of youth complete their schooling. However, due to unemployment many youths sit at home despite having matriculated. These youths are becoming increasingly frustrated at being excluded from the economy of the area.

These sources of knowledge could easily find expression in social conflict in the community. These three sources of knowledge can either result in conflict and

competition, or could, if harmonised, lead to cooperation towards a common goal (Westerman, 2008). The Bench Marks Foundation, in its interaction with these communities, would suggest that the goal is for the communities to evolve a common vision of how to realise the best possible deal for the community and the environment from the dominant economic activity in the area which is mining (Implats and RBM in partnership with Anglo platinum).

The importance of the action research process in opening up channels for social communication lies in the fact that it seeks to build the confidence of communities and their ability to effectively communicate with both the RBA and mining corporations.

Through the sharing of life stories, some more intricacies regarding communities and mining in the area were revealed. **Tlhabane** is situated on the outskirts of Rustenburg, it is more of a township than a village - here tribal affiliation is less important, however the institutions of local government is more visible here than that of traditional authority. Tlhabane was part of the old Bophuthatswana Bantustan and represented an example of the 'border industry' strategy of the *Apartheid* government. This strategy gave black workers residential rights in the Bantustan while they were employed in the 'white' town of Rustenburg. These workers had no civil/political rights in the white town. Xstrata borders on Tlhabane, and an informal settlement developed on the open field between Tlhabane and Xstrata's operation. Tlhabane is characterised by high levels of unemployment, temporary employment or semi-employment.

Ikemeleng is an informal settlement that has existed for 25 years. Ikemeleng is associated with Kroondal, a Lutheran Mission Station. When the Spar retail outlet was established in Kroondal, its employees resided in backyards of white residences in Kroondal. The *Apartheid* local government authorities demanded that this residential arrangement come to an end. A neighbouring farm was bought and the owners of Spar constructed housing on the land for its black employees. Lonmin and Aquarius operate in proximity to Ikemeleng.

After 1994, farmers, in anticipation of new land legislation which gave farm workers land rights on commercial farms, demolished farm worker dwellings and, as elsewhere in the country, dumped farm workers in squatter camps close to the nearest town. Ikemeleng became such a dumping spot for farm workers and their families. After 1994, under pressure from government and the National Union of Mineworkers (NUM), mining companies began scaling down hostels for mine workers, this combined with subcontracting (in order to break the power of NUM) and labour broking saw the introduction of the 'living-out allowance.' As noted in Policy Gap 1, the living-out allowance is insufficient for workers to afford proper formal accommodation and mine workers find themselves renting shacks in informal settlements.

The Ikemeleng population is therefore a mixture of mineworkers who originate in other Southern African Development Community (SADC) countries (Lesotho, Mozambique and Zimbabwe), South Africans who come from other mining areas such as Welkom and the Eastern Cape, and local people whose ancestors came from the area. Unlike Luka and Chaneng, Ikemeleng is therefore not an ethnic / tribal community, and although the residents of this informal settlement have no title deeds or land rights and do not fall under any ethnic/tribal authority, they fall under the local and district government.

Interesting 'stories' regarding **Marikana**, were also told. Marikana is situated north of Buffelsfontein to the east of Rustenburg about five kilometres off the N4 'Platinum' Toll Road, surrounded by Lonplat's Karee operations, Aquarius and Anglo Platinum along with some 'new kids on the block' (so called 'Juniors'). It used to be a small white farming town structured around the Dutch Reformed church. It now resembles a nineteenth century frontier mining town containing both formal and informal structures. One section of formal township housing was constructed by Lonplats for employees. These houses are now being sold to the general public at R70 000 per unit, according to some key informants. The town has several squatter camps and informal settlements around the Sterkstroom River. There is also the Marikana RDP housing complex along the same river in the shadow of Lonplat's Karee Number 3 shaft. The roads and infra-structure are generally in a poor and dilapidated state. The community here falls under the Moses Kotane District Municipality. There is no

tribal authority and it is a community of 'natives' and 'settlers' from across South Africa and SADC.

The research team was keenly aware at all times that any awareness raising initiative (social communication) should be respectful of local cultural traits and norms. At all times the PAR collective noted that, while difficult subjects should be raised, cultural features and beliefs should be treated with respect and not made to appear to be inadequate or ridiculous. To this end, the research team met with the Dikgosana (traditional authority leaders) in Chaneng and explained to them the purpose of the project and the desire to cooperate with them in the future towards dealing with the findings and recommendations of the research. The Bench Marks Foundation has also been involved in training community monitors in all the villages, an initiative that also enhanced the effectiveness of social communication. To train a few individuals in crucial new skills might be valuable, be it in reporting or research.

Most importantly, the social communication opportunities represented by the action research process, offered plenty of occasions for dialogue and discussion, and the opportunity for everyone to express their own views, to ask questions and to disagree. This represents the main difference between social communication and normal information, education and training initiatives and information gathering processes. While in conventional processes information flows from the sender to the receiver of messages, in social communication information flows in all directions and collective knowledge, awareness and skills are actually generated through social dialogue and debate.

2.5.2 Taking pictures

Members of the PAR collective were asked to take photographs (with cameras supplied by the Bench Marks Foundation) of contentious and relevant issues relating to mining impact. The photographs were then used in group discussions, allowing the group to see things through the eyes of the photographer and then helping him or her to verbalise the issues while the team captured the information. This allowed the research team to see through the eyes of the community what they perceive the major issues to be reported on. All the photographs in this report were taken by

community monitors and community members from the respective villages and small towns reviewed.

2.5.3 Participatory mapping

Each village was provided with Google Earth photographs of their village. These maps give a bird's eye view of each village and the relation of the village to surrounding mining operations. The photographs were then, during workshops, projected onto a wall, and each community then drew a map (to allow for the recycling of paper, the drawings were made on the back of old election posters or calendars). These rough maps of the geographic area under review allowed each community to register its concerns regarding the impact of mining on their land, their environment and their health and safety. This once more allowed the research team to see things from a community perspective, and minimised the literacy and lack of adequate education barriers.

Towards the end of the research process, the participants were able to move on to relatively complicated exercises, such as locating the areas most affected by dust relative to mining operations, waste facilities or trucking routes, or identifying cracked housing relative to mining operations and blasting. Where there are opencast mines in close proximity to communities, the cracked houses will increase closer to the pit, and reduce as you move away from it. Unfortunately where there is shaft mining with horizontal tunnels running under the community, things become more difficult and communities would need to have access to the underground maps of mines and the seismic layout of the geology of the area. Mining corporations are not transparent enough for communities to have access to such plans. Yet, when communities report cracked housing, 'independent assessors' paid for by the mine blame poor architecture.

Communities have observed that houses constructed with the same building materials and of same style and architecture in non-mining areas do not crack, which provides much food for thought. The maps become useful in identifying high crime areas, location of shebeens, clinics, schools, areas where sex workers operate and where there are dangerous road and rail crossings.

Photo 1: Some community research participants in Marikana pose in front of community maps



2.5.4 Story writing

Bobby Marie, Eric Mokuoa and Brown Motsau have over the last three years already done extensive work with community monitors in this regard. The Bench Marks Foundation created a blog site and a Facebook site where monitors, members of the community, students and academics may all participate and discuss mining and community issues. This allows more confident members of the monitoring teams and communities to debate and discuss issues of concern relating to mining in communities. These preliminary exercises allowed the research team not only to prepare the community for the actual research, but also to identify key actors to comanage the action research process with the Bench Marks Foundation, the North-West University and the broader community, as well as establishing mutually trusted channels of communication.

Road Map: Rustenburg Review and Community Action Research Programme:

January 2011	Literature review		
February 2011	Questionnaires to corporations		
19 February 2011	Workshop between BMF and monitors on PAR process		
2 April 2011	Workshop between BMF and monitors on research tools: maps, photographs, stories, etc.		
14 May 2011	Each village: Reported back on progress registered since 15 April; submitted Google maps indicating spatial location of identified issues relating to the impact of mining; and submitted sets of photos taken of visible impact of mining		
15 May 2011 – 2 June 2011	Research coordinator collated reports into single draft community report.		
3 – 5 June 2011	Research coordinator visited each village and verified village reports.		
15 June 2011	Draft community report. Villages filled in academic questionnaire.		
June 2011	The questionnaires were received back from corporations and review of corporations' annual reports and reports to society.		
16 June 2011 – 14 July 2011	Integration of community report and academic report.		
15 July 2011	Final community report signoff by villages.		
16 July 2011 – 15 August 2011	1 Community, BMF, NWU action plan		
16 – 30 August 2011	Profiling of the personalities of the corporations under review.		
September 2011 onwards	Writing up the report, follow-up visits to the villages to double check perceptions and conclusions on the following dates: 25 – 30 November 2011; 8 – 9 December 2011; 16 – 20 January 2012; 31 January 2012; 3 February 2012		

2.6 Fourth Phase: Review of Policy Gap 1

Finally, the intention of this research is also to review Policy Gap 1 (see Objectives, Point 1.2), and establish whether and how the CSR practises of specific mining companies changed since the publication of *The Policy Gap: A Review of the Corporate Social Responsibility Programmes of the Platinum Mining Industry in the North West Province* (Bench Marks Foundation, 2007). An in-depth study was made of the CSR and sustainability reports of all the companies. Except for the reports, this part of the research was also informed by the community action research, especially regarding the experienced personality of the companies under review.

Seeing that one of the objectives of the study is to identify and analyse the different corporate personalities, a theoretical orientation and contextualisation regarding 'corporate personality' will be given in the next section.

3. THE CORPORATION AS PERSONALITY

3.1 The corporation

Bruce Welling, after reviewing corporate law in the USA, Canada and Britain, comes to the conclusion that corporations either (i) are people in law, or (ii) have the legal rights and liberties of humans. People, and anyone with human rights and liberties, cannot be owned. He rejects that a corporation is a 'shareholder focused entity': it is just a legal person, focused on its own self-interests. He therefore rejects any assumptions that a corporation has 'stakeholders,' and that it has any corporate social responsibility (Welling, 2009).

Milton Friedman, arguing from an economic rather than legal perspective in an interview with Joel Bakan, rejects the CSR notion of a triple bottom line and argues that the only responsibility a corporation has is towards its shareholders, and that CSR is in fact theft of the funds that shareholders have invested towards realising a profit on their investment. The only circumstance under which CSR would be legitimate according to Friedman, is when the corporation practicing it is being 'insincere', that is when by practicing CSR the corporation is able to maximise shareholder's wealth, in other words when it is profitable to do so (Bakan, 2004, p. 34).

Sara Ann Bernstein (2010, pp 19 - 117), a pro-business lobbyist heading the Centre for Development and Enterprise in Johannesburg, argues that the proponents of CSR are the vanquished leftist remnants of the Cold War, who have sought new means and ways of curbing private business, after the war against private property was defeated. Her book was praised by numerous pro-business academics and corporate CEO's, including Bobby Godsell and Nicky Oppenheimer.

If the corporation is a legal person with only one responsibility, which is to act in its own self-interest, one would assume that all other legal persons also have the same rights and that therefore, natural persons and ordinary citizens also have only one responsibility and that is to act in their own self-interest. Clearly, where all actions are defined in terms of self-interest, society would quickly descent into anarchic chaos. If it is assumed that ordinary biological persons also have responsibilities, responsibilities defined by the constitution of the land and all the laws and regulations emanating therefrom, then clearly corporations should be equally responsible. Our responsibilities as ordinary citizens go well beyond the law, for where citizens perceive the state to be unjust, oppressive, irresponsible and discriminatory, they also have a responsibility to challenge the state and overthrow it if necessary.

Thus, the citizens of Italy and Germany acted responsibly when they joined the resistance against Fascism and Nazism and sought to overthrow these draconian regimes. On the other hand, citizens who actively supported these regimes in their private capacity by serving in the German army or government in senior and decision making positions, later had to face justice predicated on international law at the Nuremburg trials. What is interesting is that the corporations who actively financed and supported Fascism and Nazism with the means to be oppressive, exploitative and discriminatory, and to commit genocide were never called to account for their actions, or the profits they made from these systems. Did these corporations act in their best self-interest by supporting Hitler and Mussolini? The same question arose with the end of *Apartheid* and the Truth and Reconciliation Commission; how can those corporations that benefited from *Apartheid*, and who refused to heed the call for sanctions against *Apartheid* be held accountable?

The Bench Marks Foundation asserts that corporations do have a responsibility towards sustainable development that empowers local communities by promoting:

- The quality of life and enhancing the environment;
- Productive employment on a broad scale;
- Meeting basic fundamental human needs;
- Gender sensitivity particularly at a leadership level;
- Care for those infected with and affected by the HIV/AIDS pandemic; and
- Pollution-free production (Seoka, 2003, Foreword, Policy Gap 1).

3.2 The Bench Marks Principles for Global Corporate Responsibility

Clearly, there is a strong moral case for corporate social and environmental responsibility just as any other person is required to be law-abiding and responsible, so corporations should also be expected to behave responsibly. Which is exactly why the Bench Marks Foundation developed the policy document, *Principles for Global Corporate Responsibility: Bench Marks for Measuring Business Performance* (Bench Marks Foundation, 2003), and is currently in the process of developing *Church Leaders Call* in support of socially responsible investment. Where natural persons begin to behave irresponsibly, legal or social sanction is applied to ensure that the individual's behaviour changes, and once more becomes socially acceptable.

The table below represents a summary of the Bench Marks Principles for Global Corporate Responsibility, indicating the areas of this CSR tool used in this research.

Table 1: The Bench Marks Principles

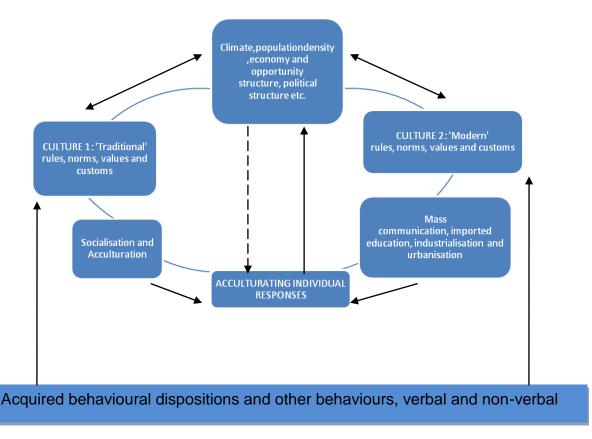
Focus areas	Issues	Subsidiary	Covered in the
		Issues	report
	Eco-systems		✓
	National Communities		✓
Wider Business	Local Communities		✓
	Indigenous Communities		NA
	Resource Extraction		✓
		The Employed – Conditions	√
		The Employed – Health and Safety	√
Corporate Business	The Employed Persons	Women in the Workforce	√
		Minority Groups	✓
		Persons with	✓
		Disabilities	
		Child Labour	NA
		Forced Labour	NA
	Suppliers		NA
	Financial Integrity		Χ
	Ethical Integrity		✓
	Corporate Governance		✓
	Shareholders		✓
	Joint Ventures / Partnerships/		NA
	Subsidiaries		
	Customers and Consumers		NA
		(Bench Marks	Foundation, 2003)

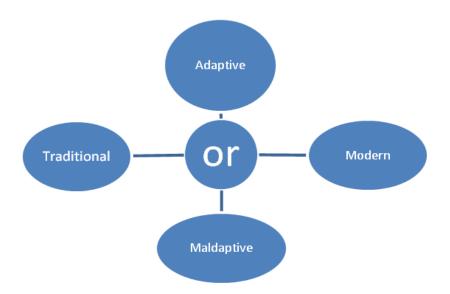
3.3 The corporate personality approach

In order to predict individual behaviour better, the science of psychology evolved so as to better understand individual behaviour. Social psychology developed in order to understand the behaviour of the individual in society and the influence of society on the psyche of the individual. Noting that, in spite of globalisation, social contexts vary, therefore social psychology might be different in a Third World context from what it is in a First World context, informed by different social norms, culture and institutional values and belief systems (Segal, 1983, pp 105 - 129).

Figure 1 below, shows the impact of a mining project on a traditional community, and the acculturation that follows, and hints at the potential divisions and conflicts such a development can have on the community, fracturing it along age, gender and traditional versus modernising lines.

Figure 1: A model of acculturation that reflects the social psychological impact of developments like mining in traditional societies on the individual (Segal, 1983, p. 118)





Given that within the dominant global economic system the corporation is assigned a legal persona, it is expected that a legal person must not only behave in terms of self-interest, but also behave responsibly in relation to broader society and that in its actions it would not in any way harm the collective social interest. Therefore, a psychological personality might be assigned to corporations and allow us to judge their actions in terms of psychological or personality traits.

According to Babiak and Hare (2006, pp. 17 - 34) every person has three personality aspects: the private personality aspect, the public personality aspect, and the experienced personality aspect, as illustrated in *Figure 2*.

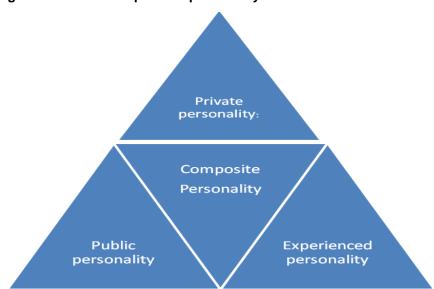


Figure 2: The three aspects of personality

This diagram was developed by the research team on the basis of their reading of Babiak and Hare, 2006.

A person's **private or inner personality** is "...made up of our thoughts, judgements, drives, needs, preferences, values and emotions. Our private self also includes the products of our imagination, including fantasies, hopes and ambitions, all of which are idealized visions of who we are and who we want to be... we believe that these positive self-perceptions represent who we are... and we can get very upset if someone suggests they are not true" (Babiak & Hare, 2006, p. 69).

The corporation as private personality generates vision and mission statements about how it perceives itself, and previous research by the Bench Marks Foundation revealed that corporations also get very upset if it is suggested that the idealised self-perception of the corporation might not be a true or accurate reflection of the state of affairs. The private self also includes personal characteristics that we do not like and which we do not want others to see.

Corporations are the same; they make employees sign non-disclosure agreements and grade communications according to whether or not they are for public or internal consumption. For ordinary persons these might include harmful things we do to other people, for example illicit or violent thoughts and fantasies, insecurities, selfishness and greed, anger, rudeness, laziness, etc. With corporate personalities this might include cutting costs and producing substandard products, paying employees starvation wages, using child or forced labour, evading taxes, providing false information to shareholders, deliberately transgressing laws and regulations, nepotism, etc.

The **public persona** refers to how you want those around you to see you (Babiak & Hare, 2006, p. 70). According to Babiak and Hare the public personality is "...a subset of the private self – a carefully edited version... of your personality that you reveal to others in order to influence how they see (and judge) you". The public persona of the corporation refers to what Naomi Klein calls the corporation's "desire to be loved" (Klein, 2005). The description of the notion of 'public persona' can also sociologically be linked to Charles Horton Cooley's concept of the 'looking glass self'; the individual's perception of how he or she is perceived by others – like a mirror reflection. As with ordinary persons, corporations try to maximise the positive things people see, while minimising the negatives. However, despite their best efforts to

control what is revealed to the public, they do occasionally reveal negative private personality traits, and with modern technology and the social media it becomes increasingly difficult to hide things from the public. Corporations use advertising, reports to their shareholders, and in South Africa, reports to society or sustainability reports to shape their public image.

The third aspect of personality refers to the reputation or **experienced aspect**. This refers to how the public experiences, views and describes the corporation. Different categories of people would experience the corporation differently. Shareholders might be happy with large profits and dividends paid out. Members of the public living in close proximity with the corporation may be happy or unhappy with the impact of their corporate neighbour, depending on whether it externalises the costs of its negative impacts to them, or bears these costs by itself, thus cleaning up any mess it makes.

A well-balanced person is one in which these three aspects of personality are in harmony, the psychologically ill personality is the one in which these three aspects of personality are contradictory; the one fails to match the other. The person might be schizophrenic in that he or she has three entirely different personalities. The person might be psychopathic in that he or she does not care about how he or she is perceived. The person might be paranoid in that they are extremely sensitive about public perception and very secretive and defensive about their private personality, etc. This also holds true for corporations.

The mining operations under review occur within a defined geographic space, the Bojanala District of the North West Province. This district is faced with its own problems and challenges, many of them related to the fact that it is the prime platinum mining area in South Africa and the world. It is therefore necessary to give a detailed overview of issues that affect this district, before proceeding to the findings of the report in terms of the private and public image and experienced personality of the corporations under review.

4. PROFILE OF BOJANALA DISTRICT

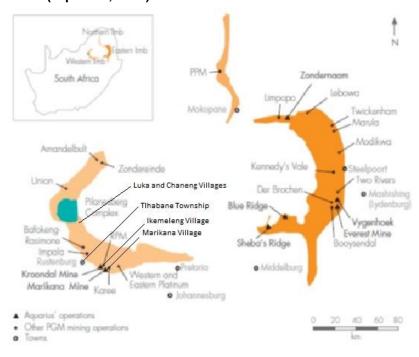
4.1 Background on the Bojanala District

Policy Gap 1 covered platinum mines in the Bojanala District of the North West Province. This review worked with communities and mines in the same district.

Figure 3: Map showing Bojanala District in the North West Province (Source: Demarcation Board)



Figure 4: Where platinum is found in South Africa. The "Western Limb" falls within the Bojanala District (Aquarius, 2010).



It is important that any CSR programme introduced into an area as heavily mined as the Bojanala District, takes into consideration the challenges faced by the people residing in that district. It is also important for operational managers to have a clear understanding of their neighbours, and the communities on whose land the mining operation occurs. It is, however, important to note that CSR, human resource and environmental managers often feel that they are last in line of the priorities set by mining corporations, and that profits and core business issues often outweigh social and environmental responsibilities. A senior Bench Marks Foundation researcher was told by an Angloplat Human Resource (HR) manager after a meeting with the HR division at one of its Rustenburg operations that, "I wish our general manager at this operation had as much knowledge about the local community as you have...."

4.2 The employment profile of the District

The Bojanala District, despite being the location of some of the richest platinum mines in the world, suffers from high levels of unemployment:

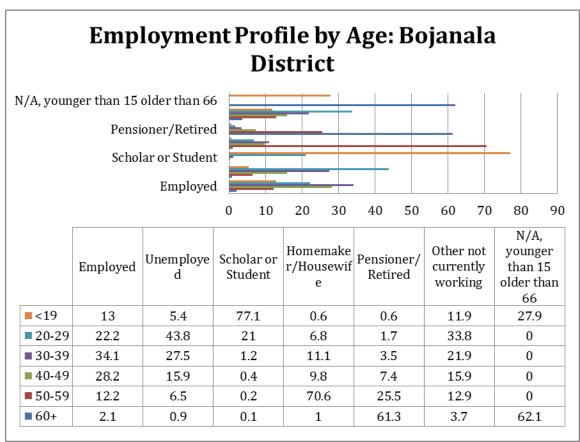
Employment status per Local Municipality 400000 350000 300000 250000 200000 Number of unemployed 150000 people 100000 Number of employed 50000 people Moses Kotane Total Boianala Rustenbure

Figure 5: Graph showing unemployment by municipality in Bojanala District (Treasury, 2011, p. 24)

Source: 2007 Community Survey Report

Employment by age group

Figure 6: Graph showing employment status by age group in Bojanala District (Treasury, 2011, p. 26)



Mining plays an important role in the economy of the region, and is the district's major source of employment. Most of the mining activities are concentrated in a band (the Merensky Reef) which stretches from west of the Pilanesberg, southwards through the Bafokeng area, and parallel to the Magaliesberg towards Marikana and Brits in the east. The mines along this belt have spawned many industries which manufacture supplementary products. Not only are chrome, lead, marble, granite and slate produced in the area, but the two largest platinum mines in the world are found in the Bojanala District (Treasury, 2011, p. 28).

Although the mining sector is Bojanala's main source of employment, many of those working on the mines are migrant labourers from other parts of the country. Unemployment in the economically active age group in the district thus stands at 16.75%, with the highest rates found in Moses Kotane and Moretele Municipal areas. Poverty is severe, particularly in the rural areas. A total of 67% of households earn

R1 600 per month or less. Many of these indigent households are headed by women (Treasury, 2011, p. 28).

4.3 The services and infrastructure situation in the Bojanala District

While access to potable water in the Bojanala District hovers at around 80%, the area's Municipal Integrated Development Plan (IDP) for 2011-2012 notes that the sanitation backlog figures are much higher (nearly 3 times more) than the water backlog in the district. The total number of households receiving below basic level of service is 226 477. The largest backlogs are concentrated in Moses Kotane (74 237 households), Moretele (56 815 households) and Rustenburg local municipalities. The figures also include households using buckets as a form of sanitation, and those that do not have sanitation at all, using old traditional dry latrines. The total number of households receiving a basic level of service is 26 162 (Treasury, 2011, p. 36).

Key issues and challenges on water and sanitation services facing the Bojanala District:

- Lack of bulk infrastructure to unlock development potential;
- Mines' disproportionate consumption of potable water;
- Influx caused by the mines;
- Poor sanitation in predominantly rural and tribal areas;
- Some areas cannot be developed due to shallow mining and environmental sensitivities;
- Illegal land invasion/squatting;
- Lack of capacity in other local municipalities to execute their function as Water Service Authorities;
- The Bojanala District is largely dependent on water from sources external to the district (totalling approximately 33 595 mega liter per year (ml/year));
- The overall water consumption within the District is likely to increase by at least 65Ml/day over the next 5 years;
- Deteriorating water quality in Hartebeespoort Dam and Crocodile River;
- Capacity and levels of maintenance of sewage treatment plants in the district and potential impact on surface- and groundwater sources;

- Potential impact of the extensive use of unimproved pit latrines in rural areas on the quality of groundwater sources which are used extensively as source of potable water supply in these areas;
- Required resources, especially budget to eradicate the estimated backlog of households without basic level of water and sanitation;
- Provision of water and sanitation to schools and clinics with no or inadequate access;
- Mushrooming informal settlements and reliance on pit latrines are contributing to elevate levels of nitrates in the ground- and surface water; and
- Collapsing sewage systems in townships where there are flush toilets contribute to the deterioration of surface water including the appearance of Bilharzia in streams around Marikana (Treasury, 2011, pp. 37 - 38).

Given the above-mentioned importance of water, it is important to note the impact that mining operations have on water throughout the lifespan of a mine (*Table 2*).

Table 2: The impact of mining on water throughout the life of a mine

Mine Phase	Typical Activities	Water Use	Impact
Exploration	Subsurface investigations (drilling, exploration pits, adits or shafts)	Water for exploration drilling	Drilling riggs crisscrossing the veldt leave tracks that lead to soil erosion and donga formation
Planning	Feasibility studies including further drilling	Water for drilling, dust control	Identification of groundwater aquifers that pose danger to underground mining; draining of aquifers or cementation of aquifers; creation of well fields to drop the groundwater table and ensure dry mining conditions in open cast pits
Development and commissioning	Construction (mine infrastructure, shaft or open cast pit, processing plant, tailings storage and water treatment	Geotechnical drilling, dust control	Pollution by means of acid, diesel, oil and other chemical spills

Mine Phase	Typical Activities	Water Use	Impact
	facilities) Mineral Processing	Process water added during size reduction and used in mineral extraction process. Dust control. Smelters release SO ₂ into the atmosphere	Pollution by means of chemicals used in mineral extraction such as acids in the case of copper, mercury and cyanide as in the case of gold; contributes to acid rain (impacts on atmospheric pollution)
	Development of waste facilities (waste rock, tailings storage)	Process water for tailings slurry; some water retained within tailings and is not recycled to process plant; dust control	Chemical reactions as minerals in wastes come into contact with air and water – acid mine drainage (AMD); heavy metal pollution; Sulphide and Nitrate pollution in the case of platinum mining
Operations	Underground and pit extraction	Dewatering the work area to make it safe. Cooling for equipment such as rock drills and machinery; water used in the ventilation and air cooling systems; dust control	The use of 'brown-water' (semi-processed sewage water) has health implications for mine workers and impact on natural water sources; dewatering cause wells and boreholes of surrounding consumers to dry up
	Energy consumption	Electricity supplied by coal fired power stations consumes huge quantities of water in the generation of steam	Coal mining has a huge impact on water in the form of AMD; power generation has a huge impact in terms of SO ₂ into the air and acid rain
	Product transport	Low, usually transported dry; dust control	Dust control leads to pollution of surface- and groundwater
Closure and completion	Decommissioning: Dismantling of site infrastructure, site reclamation	Water lost during long term tailings consolidation	Land subsidence, sinkholes in the case of tunnel mining, and the impact of tunnels that fill up with groundwater and the development of

Mine Phase	Typical Activities	Water Use	Impact
			funnels where pits for open cast mining used to be impacts on ground- and
			surface water; run-off and seepage from tailings and rock waste continues to impact on surface-
			and groundwater

4.4 Housing backlog in the Bojanala District

The 2011-2012 Bojanala District's IDP developed with the assistance of the National Treasury, shows that the most significant challenges regarding housing backlogs are concentrated in the Rustenburg and Madibeng local municipalities. These two areas have both the highest proportional and actual number of households residing in informal dwellings. Within the Rustenburg Local Municipality's geographical area of responsibility, it is estimated that as much as 41% of households are residing in informal dwellings (27% in informal settlements and 14% in backyards) and approximately 33% in the case of Madibeng (26% in informal settlements and 7.7% in backyards). In all three the other municipalities the proportions of households residing in informal structures are between 15% and 16% (Treasury, 2011, p. 52).

The total remaining housing backlog by 2005 was approximately 101 114 units, the bulk of which is located in the Rustenburg Local Municipality (49 034) and the Madibeng Local Municipality (22 826). These figures also indicate that the progress with housing delivery in the District between 2000 and 2005 has been modest with approximately 22 272 houses built over this period. The total financial requirements to address the remaining backlog would be a significant amount in excess of R2.5 billion (Treasury, 2011, p. 53).

One of the key aspects that impacts on developmental activities within the Bojanala District Municipality is land ownership, with approximately 32% of the total large areas of land under custodianship of various traditional authorities.

The figures for traditional/communal ownership range from as high as 73% in the Moretele Local Municipality, 50.8% in the Moses Kotane Local Municipality and approximately 37% in the Rustenburg Local Municipality area. Both economic growth

and investment, poverty alleviation and the meeting of basic needs are inextricably linked to land ownership, and it will thus be necessary to establish a sound working relationship between traditional authorities and other government structures within the district and mining corporations (Treasury, 2011, p. 53). The mining corporations operating in the Bojanala District area claim to contribute greatly to community development through their relationship and agreement with traditional authorities. However, the information contained in this profile indicates that much of the district's human development and service delivery problems occur within areas under the control of traditional authorities where there is also a high concentration of mining activity.

The key issues relating to housing development in the Bojanala District include the following:

- Large housing backlog of approximately 101 000 units in the district with a significant proportion concentrated in the Rustenburg Local Municipality (approximately 49 000 units);
- A modest total of approximately 22 000 houses was completed between 2000 and 2005 in the district;
- Large and growing informal settlements in certain parts of the district (for example Rustenburg area);
- Illegal occupation of land and unlawful evictions in rural areas;
- Unavailability of bulk infra-structure to support housing development in rapidly growing areas (for example Rustenburg);
- Implementation of housing and land reform projects without the provision of complimentary social and economic facilities;
- Absence of a clearly formulated district wide housing delivery and land reform strategy;
- Lack of clear direction and strategy with regards to dealing with housing demand in rural and farming areas;
- Limited capacity at local government sphere to support housing delivery and land reform processes (Treasury, 2011, p. 53);
- Mine company housing policies greatly aggravate the housing challenges faced in the Bojanala District. The living-out allowance contributes to the

mushrooming of informal settlements and backyard shacks. Substandard houses built by mining companies for their employees crack as a result of blasting and poor quality. One mining company in the Marikana area even relocated farm workers to a 'blikkiesdorp'; and

 A complete disrespect for the private space of residents in local communities.

Photo 2: Complete disregard for the living space of members of local communities. A shaft ventilation system erected in Chaneng, in between community houses; residents were not consulted prior to the construction.



Photo 3: 'Blikkiesdorp' for relocated farm workers in Marikana



Photo 4: Current housing stock in villages and townships is being ripped apart by blasting and tremors



4.5 Education facilities in the Bojanala District

The education facilities are reflected in *Table 3*.

Table 3: Education facilities in the Bojanala District by type (Source: Treasury, 2011).

Type of Educational Institution	Number
Primary Schools	349
Intermediate/Middle Schools (Gde 5 – 7)	127
Secondary Schools	116
Combined Schools	20
Technical Colleges	2
University	0
TOTAL	614

According to the 2007 Community Survey Report, the majority of the population in the district out of a total population of 1 268 618 falls within the category of 20-39 years at 34.9%, followed by the category of 19 years and younger at 36.5%. The 36.5% of the 19 years and younger category informs us that a significant number of young people (currently younger than 19 years of age) will be entering the labour market over the next 5-10 years, and would be seeking employment opportunities. It also signifies a specific need for social amenities such as schools and health services (Treasury, 2011).

The educational status of the population older than 20 years of age indicates that the Bojanala District labour market is characterised by low skills levels. As much as 15.1% of the population older than 20 years have not received any form of schooling

and a further 19.7% only some primary education. These figures imply that nearly 35% of the total adult population can be regarded as functionally illiterate (Treasury, 2011, p. 21).

Conversely, only 20.1% of the adult population has completed their high school education and only 5.5% has obtained some form of tertiary education (Treasury, 2011).

Considering the constant refrain of big business in South Africa, including mining companies, that the country is experiencing a skills shortage, one would expect massive investment in education as a primary concern for CSR programmes. It is interesting to note that there is no mining technical college in Rustenburg. Violent community protests in Marikana, Chaneng and Kroondal/Ikemeleng over the last six months of 2011 indicate a high level of youth discontent with lack of education, training and employment opportunities. After carefully following and monitoring the education and employment situation, the Bench Marks Foundation is not surprised that communities have erupted and predict that more such conflict situations can be expected.

All the mining corporations under review contribute to the construction of classroom blocks and in some cases to feeding schemes. However, this is often done in a haphazard manner. For example, a company will build a fully equipped computer laboratory for a school only to find that the Department of Education considers the employment of a computer teacher at the school to be an unfunded mandate. The computer laboratory is then simply locked up and the equipment stands and gathers dust while the software becomes outdated.

4.6 Health and HIV/AIDS in the Bojanala District

It is extremely difficult to find reliable, up to date statistics for HIV/AIDS infection and prevalence by district or town in South Africa. According to the District Health Barometer (2005/06), Bojanala District Municipality has the third highest HIV/AIDS prevalence of all the districts in South Africa, with an HIV/AIDS prevalence of 35.3% in women attending antenatal clinics in 2005/06. Only 37.7% of all pregnant women were tested for HIV/AIDS despite the very high prevalence rate.

On average, 40% of all deaths in the North West Province are related to HIV/AIDS. When this figure is divided into various age groups, the impact of HIV/AIDS becomes more apparent, especially in children under 4 years of age (70 per 1 000 births) and in adults between 15 and 44 years of age. Among children younger than 4 years, over 40% of deaths among males and over 43% of deaths among females were caused by HIV/AIDS. In adults between 15 and 44 years, which also forms a significant component of the economically active population of the North West Province, these figures were even higher at over 43% of deaths among males and over 63% of deaths among females (Medical Research Council, 2006).

It is however possible that these figures may be higher, as not all deaths related to HIV/AIDS are recorded as being due to the pandemic (North West Provincial Government: Department of Agriculture, 2008). Medical staff, such as nurses at clinics and doctors in the Bojanala District, speculate that as much as 60% of deaths could be due to the pandemic in the area.

There are close, well established causal links between HIV/AIDS, TB and the reliance of mining on a highly mobile migrant labour system. David Mametja, the head of the National TB Control Programme, noted that there is 'a silent accident' happening in South African mines daily, where deaths from TB far outstrip those from workplace accidents. Professor Gavin Churchyard makes the point that "[w]e [in South Africa] are dealing with a highly mobile population in the era of HIV...", because miners have regular interaction with the wider communities in which they live (Parker, 2012).

The Bench Marks Foundation has warned in Policy Gap 1 in 2007 that the employment practices and housing policies of mining companies are contributing to the failure of the provincial, district and local governments to bring HIV/AIDS under control. This continues to be the case. Particularly disturbing are reports from informants that there are cases of migrants bringing in young women from rural villages in Mozambique and using them as sex slaves to earn extra income. It is claimed that such women do not have the required travel or residential documents, and that they cannot speak any of the local languages. It is alleged that they are locked up in shacks from where off-duty mine workers pay the owner of the shack for

sex with the woman kept inside. Interestingly, this community concern is supported by the 2010 report of the International Organisation on Migration, according to which there is "[a] practice termed 'ngoanatsela' has been reported to take place among Basotho mineworkers coming to work in South Africa. The practice entails bringing a young girl from home as a 'girlfriend', but in effect making her available to a group of mineworkers coming from the same region. Frequently these young girls are unaware of what lies in wait for them once they reach the mine, but have no recourse for escape in a foreign country where they may not know the language or how to seek help" (Interviews with former mineworkers in Lesotho, 2006) (International Organisation on Migration, 2010).

Another disturbing phenomenon that is allegedly taking place in communities in proximity to the mines is that of mothers 'renting' out their daughters to mine workers. The high unemployment rate amongst local people and the exceptionally low income of families (see the report on Luka community below) make sex work one of the many survival strategies of households (information obtained from monitors and women in communities during numerous field visits).

4.7 Comments on the Bojanala District Profile

Clearly, any mining operation operating in a particular geographic space would design its CSR programme around the following:

- Mitigating its own impact on its immediate operational boundary as well as
 its wider social, economic and environmental footprint; and, where such
 impact is unavoidable, allowing the surrounding population to meaningfully
 participate in committees created to mitigate such impact, including disaster
 management committees, health and safety committees, environmental
 management committees, mine closure committees and recruitment
 committees:
- Not externalising any social, environmental or economic costs of its operations to the surrounding population or structures of governance and authority;
- Contributing meaningfully to the development of social, economic and environmental development and sustainability of the region, district or local

- geographical area, including the development of infrastructure, health and education facilities accessible to all;
- Seek prior and informed consent for developments at every stage of the life of the mine and accepting the right of communities to refuse;
- Meaningfully compensate communities and individuals for any damage or loss they may suffer as a result of the mining activity; and
- Accept responsibility and liability for any unintended consequences of mine development or corporate policies.

Many of the challenges faced by communities living in the Bojanala District are directly and indirectly attributable to mining in the area. The research findings on specific companies will assess if the mining corporations in Bojanala District are addressing these challenges through their CSR programmes or not. In the next section, findings regarding specific companies, based on different reports as well as the questionnaires, will be reported.

5. FINDINGS

5.1 Anglo Platinum

5.1.1 Private and public personalities

Anglo Platinum in its own words: Operational and Product Profile: OUR OPERATIONS

Anglo American Platinum Limited (Amplats) is listed on the JSE Limited and is the sole listed entity for the Group. The Company no longer has a secondary listing on the London Stock Exchange or depositary receipts for the Company's shares on the Brussels Bourse.

Amplats is a subsidiary of Anglo American plc, which holds a 79,72% share in Amplats. The word 'Group' in this report, however, refers only to Amplats and its major, wholly owned subsidiaries, primarily Amplats Management Services (Proprietary) Limited; Rustenburg Platinum Mines Limited (RPM); Twickenham Platinum Mine; Lebowa Platinum Mines Limited (until 30 June 2009); and all other subsidiaries.

The Group is also engaged in joint ventures and partnerships. It has governance structures in place with its joint-venture partners, and representation on the boards and board committees of its joint-venture partners, details of which are included in governance. The Group's smelting and refining operations are wholly owned through RPM and are situated in South Africa. These operations treat concentrates from wholly owned subsidiaries and joint ventures.

In Zimbabwe, the Group is developing the Unki Platinum Mine, and our policies and standard procedures apply to the management of the Unki project, which is expected to come into production in the latter part of 2010.

MAIN PRODUCTS AND NATURE OF MARKETS SERVED

Amplats is the world's leading primary producer of platinum and accounts for about 40% of newly mined production globally. It also produces other platinum group metals (PGMs) including palladium, rhodium, ruthenium, iridium and osmium. Nickel, copper, other base metals and gold are also produced.

Some 44% of the world's platinum is used in auto catalysts, which are designed to reduce noxious emissions from vehicles. The demand for auto catalysts declined by 27% in 2009, to its lowest level since 2002. (A more detailed market review appears in the 2009 Annual Report.)

The Group is firmly committed to the development of PGM markets and, in cooperation with Johnson Matthey and others, researches and promotes new products using PGMs, particularly in environmental applications. Amplats created the Platinum Guild International (PGI) in 1975 and provides funding for its jewellery development efforts. The Group is active in other industry organisations, including the International Platinum Association, which is an advocacy forum for producers and fabricators, and attends to sustainability-related matters on behalf of the industry via its Safety & Sustainable Development Committee.

Source: http://www.angloplatinum.com/sus/sd/profile.asp

In her Chairman's statement, Cynthia Carol praises the Anglo Platinum corporation for a "...marked safety improvement..., good cost management and significant improvement in productivity" (Carol, 2010, p. 3). The company's vision is to be "...the premier company in finding, mining, processing and marketing PGM's for the maximum benefit of all our stakeholders". Clearly the corporation would like the public to believe that it is serious about CSR, and it lists eleven different categories of stakeholders. Under the community category, three different Municipalities are listed and under Bojanala District Municipality, fifteen villages and towns are recognised, including one of the villages under review in this research, namely Chaneng.

Anglo Platinum indicates its desire to improve its understanding of society "...and our place within it, through active engagement with those around us. We recognise the value of partnerships in building capacities, improving governance and promoting sustainable development". Mr Neville Nicolau, the CEO of Anglo Platinum, reports that the company has "...achieved a number of noteworthy milestones in 2010 in support of our social and labour plans and in compliance with the Minerals and Petroleum Resources Development Act (MPRDA):

- 12% women in mining compared with the 10% requirement;
- 50% historically disadvantaged South Africans (HDSA's) in management positions, compared to the 40% requirement;
- HDSA procurement of 40%, up from 39%, equating to R8.2 billion spent with HDSA suppliers in 2010; and
- Plans to build 20 000 houses in the next 10 years" (Nicoleau, 2010).

In addition to this, Anglo Platinum announced its intentions to "...roll out a multi-billion Rand Black Economic Empowerment (BEE) initiative to benefit communities surrounding its four major mining operations... equal to between 1% and 2% of the group's market value... This transaction is intended to provide the beneficiary communities with long-term equity ownership in Anglo Platinum" (Radebe, 2011). The Chairman of the Board states that "...our ultimate ambition is to make a meaningful and sustainable contribution so that these communities thrive well beyond the life of our mining operations" (Carol, 2010, p. 4).

The company report, unlike their 2006-2007 report, also refers to the reassignment, where possible, of people who have suffered disabling injuries and gives figures for those boarded as a result of injury or illness. Anglo Platinum has also managed to significantly reduce fatalities at its South African operations (Anglo Platinum, 2010). Anglo Platinum is also taking a lead in significantly reducing the number of subcontractors in its employment from 14 014 in 2009 to 5 513 in 2010 (Anglo Platinum, 2010, p. 41). The financial crisis of 2008/09 saw a dramatic drop in platinum prices and massive retrenchments at all mines which could account for the drop in the use of sub-contracted labour.

With reference to the environment, Anglo Platinum reports that all operations are challenged by the supplying of water noting that "[t]he company has a comprehensive water strategy. We remain committed to minimising water use and to reusing and recycling. We have collaborated with Government; industry and other affected stakeholders to develop a comprehensive, long-term strategy to address the economic, social and environmental issues related to water availability in Limpopo Province. This agreement now brings fresh running water to in excess of 1.9 million people in several communities in the province for the very first time. It also secures our water rights on the Eastern Limb of the Bushveld Complex while ensuring our consumption does not adversely affect water availability to communities and ecosystems" (Carol, 2010, p. 4). Ms Carol fails to mention that the damming of water in Limpopo represents the commodification of water to communities that previously had free access to river-, well- and borehole water.

Concerning water Anglo Platinum found:

- High concentrations of nitrates, chlorides and sulphates in ground- and surface water around their mine tailings and rock dumps;
- Biodiversity and rehabilitation action plans have not been fully implemented at all tailings facilities; and
- In some instances water management plans need improving (Anglo Platinum, 2010, p. 120).

In the Rustenburg area, Anglo Platinum admits to exceeding permit emission levels of SO₂ and showing a significant increase from 5.3 kiloton (Kt) in 2009 to 7.5 Kt in

2010. This was attributed to the shutdown of the Waterfall smelter for maintenance (Anglo Platinum, 2010, pp. 110-111). Anglo Platinum also admits to the need for increased dust suppression measures in the Rustenburg area.

These admissions imply that Anglo Platinum once more falls short with regards to the Bench Marks Foundation's policy document, *Principles for Global Corporate Responsibility: Bench Marks for Measuring Business Performance* (Bench Marks Foundation, 2003), particularly the sections of the document that refer to Ecosystems and Resource Extraction.

5.1.2 The experienced personality of Anglo Platinum

Clearly Anglo Platinum sees itself outside of the Friedman, Bernstein, Segal school of thought. This school holds that a corporation only has responsibilities towards its shareholders (Friedman), has no stakeholders other than those who fund it (Bernstein), or finally that no one has any claims on a corporation, not even its shareholders; a corporation is responsible only to itself and is driven by its own self-interest. Is Anglo Platinum doing CSR honestly or dishonestly, as Friedman argues that the only legitimate CSR is dishonest CSR, when the corporation is actually lying to the public? The Bench Marks Foundation would like to believe that the company is being honest and sincere in its reporting. However the research team perceived a number of gaps and would be amiss if we fail to raise the following concerns.

5.1.2.1 WOMEN IN MINING

While the achievements in exceeding the Mining Charter target for the employment of women in mining is an improvement by Anglo Platinum, the Bench Marks Foundation is concerned about the conditions under which this employment occurs. These concerns apply to all mining companies in the District. In discussions with the National Union of Mineworkers (NUM) members and shop stewards in the area, it was noted that the Mining Charter target of 10% women in mining is highly problematic. This is because women in the lowest paid categories make up an insignificant minority in each shift; with 10 women out of every 100 workers this imbalance creates the conditions for sexual harassment and exploitation, and very little has been done to change the macho culture operating within the closed

environment of a mine. What is more, studies show that women are deployed as supplementary rather than core labour (Benya, 2009, p. 78).

A Human Resource (HR) officer (who will remain anonymous for fear of employer sanction) told the Bench Marks Foundation team that Anglo Platinum uses local Chiefs and Councillors to recruit on their behalf. The Bench Marks Foundation monitors and members of the community say that the Chiefs and Councillors abuse this recruitment responsibility to trade jobs for sex. We are in possession of a video recording of an informant in Marikana who tells us that she has been for interviews five times and "...every time they have asked me for sex, I refused every time, which is why I am still unemployed, but I will never give in".

The Bench Marks Foundation would therefore like to challenge mining corporations to go beyond reporting numbers in their compliance reporting and indicate what has been done to transform the workplace culture and environment to accommodate female workers. Out of 6 000 female employees (i.e. 12% of the total labour force), 3 000 work in core disciplines such as mining, engineering and metallurgy. The two graphs below (*Figure 7 & Figure 8*) show that the vast majority of women are in the unskilled and semi-skilled categories. The graphs further show that women in the unskilled and semi-skilled categories make up exactly 10% of the total labour force in these categories. Research also shows that women are disadvantaged in the labour market by their relative lack of experience in mining.

Other disadvantages in the workplace include a lack of facilities especially designed for catering for the needs of women. Thus, women are expected to undress in front of male staff and male workers during health and heat tests and women find themselves the objects of sexual ridicule and groping during first aid and disaster exercises (Benya, 2009, p.79).

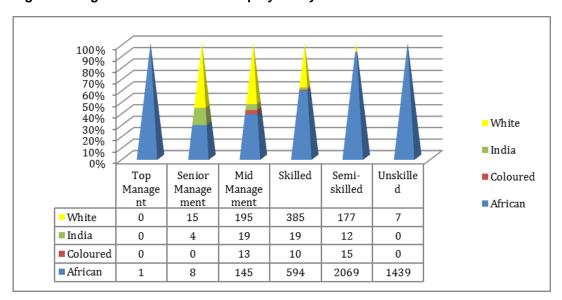
A Bench Marks Foundation researcher had the benefit of visiting Impala Platinum's Ngezi Mine and Mimosa Mine in Zimbabwe, jointly owned by Impala Platinum and Aquarius. These two operations - while not meeting Anglo Platinum's numbers with regard to the employment of women - have been very creative in the appropriate deployment of women, particularly as transport and machine operators. Both mines

report that their machines and vehicles are being much better cared for and with fewer breakdowns.

Table 4: Schedule of visits to platinum mines in Zimbabwe

Date of vis	it	Mines Visited	Reason
29 August - 4 September 2010		Ngezi Mine /	Technical advice from the Bench
		Mimosa Mine	Marks Foundation to Southern
			African Resource Watch (SARW)
			and Zimbabwean NGO's
23 September – 25 September 2010		HARARE	Report Back to NGO's, Zimplats
			and Acquarius on findings of
			previous visits
8 May – 10 May 2011	HARARE	Workshop Parliamentary portfolio committee, mines	
		and NGO's	

Figure 7: Anglo Platinum: Female employees by race and educational level



The Bench Marks Foundation team heard disturbing reports about the consequences of the demographic discrepancy between male and female employees underground. A female geologist told us "I walk with a knife in my pocket everywhere I go on the mine, women are not safe here." A HR officer told us "...towards the end of the month there is a lot of transactional sex going on underground, women sell sex to supplement their incomes, everywhere you go underground, you find used condoms lying around" (January 2012). The same HR officer told us "[w]e have to monitor the cages [lifts] going down or up to see that they are not overcrowded, because when they are jam-packed, the women get groped and abused" (January 2012).

In conclusion, mining corporations should view the issue of gender equity as more than just a paper / compliance exercise that requires the achievement of a target number, and realise the anthropological, social and cultural implications thereof by ensuring that the necessary spatial/environmental and infra-structural transformation is taken care of, so as to eliminate distress and abuse.

The Bench Marks Foundation was not surprised to hear the shocking news of the rape and murder of a female worker at Anglo Platinum's Khomanani operation near Rustenburg in February 2012 (SAPA 2012). With regard to gender issues the above implies that Anglo Platinum once more falls short with regards to the Bench Marks Foundation's policy document, *Principles for Global Corporate Responsibility: Bench Marks for Measuring Business Performance* (Bench Marks Foundation, 2003).

5.1.2.2 HDSA'S IN MANAGEMENT AND OCCUPATIONAL LEVELS

It is pleasing to note that Anglo Platinum has increased the number of HDSA's in management and that they exceed the Mining Charter's target by 10%. However, the research team is concerned that the employment pyramid at Anglo Platinum only reflects the demographical reality of South Africa at the bottom of the pyramid where the vast majority of employees are 'African.' As one proceeds up the occupational ladder, blacks become progressively fewer and white persons more.

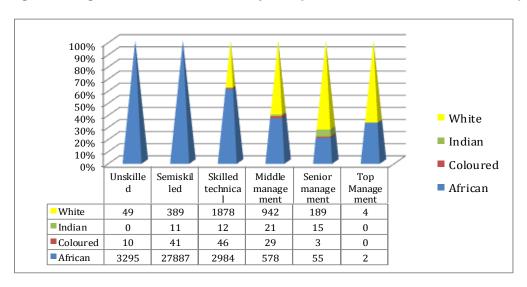


Figure 8: Anglo Platinum: Breakdown by occupational level and race of male employees

It is interesting to note that all the corporations under review are unable to compare with the empowerment achievements of Botswana and Zimbabwe (see schedule of visits above – Table 4) where mines are operated almost entirely by black miners at all levels of occupation.

The Bench Marks Foundation is disappointed by the fact that Anglo Platinum has also fallen into the trap of appointing persons politically connected to the ruling party for top management positions with the appointment of the former minister of the Department of Environmental and Water Affairs, Mr. Vali Moosa. Appointing senior people of the ruling political party has been identified by many commentators as corporate attempts at state capture and the sub-version of democracy. Recent Zambian elections have shown that a time will come when the electorate will express its dissatisfaction with the close relationship between powerful politicians and powerful corporations, by voting the ruling party out of power. One of the factors behind recent civil disturbances in Botswana is also the public perception that the government and ruling party is in an unhealthy relationship with the dominant mining corporation in the country (see Policy Gap 5).

There is no indication in the information given about the number of local people, meaning people born and bred in Bojanala District, who are employed by Anglo Platinum in its mines within the District. Mining companies often hide behind 'residence' as an indicator of local employment, but this is skewed by the impact of the living-out allowance which places many migrant workers in local residences.

5.1.2.3 PLANS TO BUILD 20 000 HOUSES OVER THE NEXT TEN YEARS

The matter of the construction of houses for employees is reported in the company's annual report as if it is a non-retrievable cost to Anglo Platinum. In fact, the houses of which 1 000 will be constructed in the Bojanala District over the next year are part of a 'home-ownership scheme.' This means that the houses are being sold to employees and that Anglo Platinum will merely assist employees with bank guarantees for home loans. The Bench Marks Foundation has a number of concerns about this arrangement.

Firstly, should the employee be retrenched for whatever reason (a market collapse and employee downscaling, illness, injury or dismissal), the employee will be unable to continue down-payment on the house and will lose it. Schemes like these undermine the employee's freedom of association, his right to organise and his right to withhold labour, because any of these actions will mean no income for the duration of the action (the no work no pay principle applies in South Africa). This will affect the employee's ability to pay his or her monthly instalments on the bond which will cause the bank to repossess the house.

The Bench Marks Foundation is therefore not surprised in talking to employees, to find that most prefer not to go for this home ownership option, but to rather take the living-out allowance thereby swelling the size of the informal settlements around the mines. The home ownership scheme is therefore little more than an externalisation of the costs of accommodating workers. Contrast this to the colonial context, where a former minister of mines informed the research team that during colonial times in Zambia, Zimbabwe and South Africa mining licences were issued on condition that the mining company is responsible for construction and maintenance of the entire urban infra-structure.

At the source of the mineral discovery, his contention is borne out by D. Jacobson's *From Maize to Gold,* in which he describes the founding of the Free State Gold fields and the mining town of Welkom: "This was nothing less than an application to the Free State Townships Board to establish a township to be known as Welkom... No haphazard development this, for Welkom, with strong financial backing, had been planned on modern lines to meet the needs of the five mines to be opened up around the proposed township at a capital cost of between £22 000 000 and £25 000 000. Welkom would provide housing for 30 000 Europeans and about 7 000 natives. The plan embraced a modern aerodrome, a large sports ground, separate residential and industrial areas and a ring and radial system providing easy access to and from the township and neighbouring areas" (Jacobson, 1947, p. 60).

Substantial contributions towards the development of Welkom came from the Chamber of Mines, and most white mineworkers rented mine subsidised housing, while black migrant workers were housed in compounds. This mining development

model stopped after independence in most African countries and as democracy approached in South Africa, it ceased even here. Against the background of Policy Gap 1, the research team noted the importance of family housing in the fight against:

- HIV/AIDS;
- substance and alcohol abuse; and
- violence against women and children.

The Bench Marks Foundation is disappointed that not much seems to have changed in this regard. The link between a stable (non-migrant), locally recruited, properly housed labour force and lower HIV/AIDS infection rates is also well documented in the literature (Lurie *et al.*, 2003; see also Brummer 2002; International Organisation on Migration 2010).

5.1.2.4 MULTI-MILLION RAND BLACK ECONOMIC EMPOWERMENT DEAL FOR COMMUNITIES

The Bench Marks Foundation is keenly interested to hear about this scheme and enquired about it at the first opportunity from the managers of the company's CSR programme. We were informed that the programme would be modelled on the Royal Bafokeng Model, and secondly, that the communities would be purchasing the shares. From our experience, this empowerment model involves the communities obtaining the shares through the assistance of financial institutions. The communities then repay the financial institutions through a 60/40 repayment system where the community retains 40% of annual dividend payouts, and the financial institution taking 60% of the annual dividend payment to the communities. Not to mention that it is an interest bearing debt.

Should communities accept this offer, they will immediately become hugely indebted to financial institutions, and should there be a market collapse as in 2009, their share ownership might come to an abrupt end. The possibility of such a scenario is reflected in Anglo Platinum's step with regard to another BEE partner, Anooraq, who are under threat of relinquishing their shares back to Anglo Platinum for failure to keep up with bank repayments as reflected by Matthews: "Another step was to buy back some of the assets it originally sold to empowerment group Anooraq on which Anooraq incurred a R3bn debt which it could not pay. The deal will reduce Anooraq's

debt by about R1.7 billion. Nqwababa says AngloPlat will not incur a 'material cost' on the bailout." (Mathews 2012).

Anglo Platinum's Community Empowerment project in the Media

Business

Feb 8 2011 8:12AM

Anglo Platinum to invest billions into communities

RIDING HIGH: Proposed BEE deals for communities around Anglo Platinum's operations could be as much as R4bn. Picture: smei.co.za

Sibonelo Radebe

Anglo Platinum is preparing to roll out a multibillion rand BEE initiative to benefit communities surrounding its four major mining operations.

The largest platinum operation in the world, Anglo Platinum, announced yesterday that qualifying communities in its Limpopo and North West operations would benefit from deals that are likely to equal between 1% and 2% of the group's market value.

Anglo Platinum's market value was quoted around R191bn on the JSE yesterday which puts the value of the proposed BEE deals in the region of R4bn.

The Anglo Platinum deal comes as pressure is mounting on mining entities to embrace sustainable development by integrating communities in and around their operations into their business models. Sustainable development activists have become more critical on the impact of mining on affected communities.

"Mining companies have a responsibility to foster economic development in communities affected by their operations," said John Capel MD of Bench Marks Foundation which monitors corporate social investment (CSI) initiatives in the mining industry.

The Mining Charter calls for the integration of communities into the BEE initiatives of mining houses.

"Anglo Platinum has been exploring ways of enhancing the benefits that accrue to host communities," said the group. "This transaction is intended to provide the beneficiary communities with long-term equity ownership in Anglo Platinum".

The group said the terms and final structure of the transaction would be determined after consultations with the communities were concluded. This initiative would impact on communities around the Twickenham mine, Mogalakwena and Amandebult in the Limpopo province. The initiative extends to Anglo Platinum's operations in Rustenburg where the group runs a number of mines including Khomanani, Bathopele, Siphumelele, Thembelani and Khuseleka.

"Our host communities have long benefited from the presence of our mines in their areas," said Cynthia Carroll, chairperson of Anglo Platinum and CEO of parent company, Anglo American. "Our operations have provided jobs, procurement and supply chain opportunities, infrastructure development, enterprise development, support of the education and health sectors and many other community development initiatives over many years," said Carrol. Anglo Platinum CEO Neville Nicolau said the initiative begins a "process of creating sustainable legacies that will outlast the lives of our mines".

Anglo Platinum operations seem to be firing on all cylinders if the numbers released yesterday are anything to go by.

The group's financial results for the year ended December showed revenue increasing by 25% to R46.3bn largely on the back of strong platinum group metals (PGMs). The price of platinum realised by Anglo Platinum during the course of 2010 improved 34% to \$1611 (about R11700) an ounce. The improvement was strong enough to counter the effect of a stronger rand.

Anglo Platinum recorded a 688% improvement in operating profit from R921m in 2009 to R7.2bn in 2010. This staggering increase is partly explained by extraordinary items including the sale of shares in associated operations.

These include the disposal of 37% in the Western Bushveld Joint Venture and a gain from the listing of Royal Bafokeng Platinum. Anglo Platinum's prospects further improved last year after concluding a R12bn capital raising exercise through a rights issues which greatly improved its balance sheet.

Source: http://www.thenewage.co.za/9902-9-53-Anglo_Platinum_to_invest_billions_into_communities

In contrast with the above report, the Bench Marks Foundation read with interest financial reports at the start of 2012 to the effect that Anglo Platinum announced that "[d]iluted headline earnings per share (HEPS) decreased by 30% to 1,354 cents for the year ended in December 31, 2011 from 1,929 cents in 2010. Anglo Plat said the drop in HEPS was due to the impact of a R1.07 billion once-off accounting charge, for a broad based community economic empowerment transaction, which offset the increase in operating profit" (Mathews 2012). Does this represent an investment by Anglo Platinum in the community, or is it a community investment in Anglo Platinum?

Anglo American Corporation sets up Section 21 Companies in communities to give effect to these empowerment deals such as the one above. The Bench Marks Foundation has expressed its reservations about Section 21 Companies and about the Bafokeng Model in previous Policy Gap Reports. Apart from the commodification of the traditional identity (Comaroff & Comaroff, 2009, pp. 99 - 116), we have

experienced massive discontent from the population in Phokeng over land issues, mining rights, and the perception that the benefits of mining does not trickle down to ordinary people in terms of improved health and education, improved infra-structure and employment opportunities. Communities feel that Section 21 Companies as deployed by Anglo Platinum represent corporations rather than communities.

The comments below reflect the frustration of members of the Chaneng community with mining corporations' CSR programmes and the mechanisms such as Section 21 Companies, supported by their pictures.

"These signboards you see all over Chaneng saying the company did this and the company did that... It is all just window dressing, it is all just advertising." Joseph, community member.

Photo 5: An Anglo Platinum CSR advertising board in Chaneng



Photo 6: Wall-less and door-less toilets in a Chaneng school. This reminds of the lack of privacy that mine workers suffer in change rooms and during medical checkups



"They put in a computer centre at the school, without first checking that the Department of Education budgeted for a teacher, so now the computer centre is just standing there, unused." Chris, Chaneng community member.

5.1.2.5 PEOPLE WITH DISABILITIES, MINE HEALTH AND SAFETY

The Bench Marks Foundation notes with satisfaction that Anglo Platinum now reports on the redeployment/reassignment of people who suffered debilitating injuries or illness by Anglo Platinum, following the recommendations in Policy Gap 1

in 2007. However, the Bench Marks Foundation is concerned by a number of persisting gaps. Firstly we are concerned about the fact that work injuries are only reported as lost time injury frequency rate statistics (Anglo Platinum, 2010) and not as actual numbers of workers injured, the conditions, time, place and nature of such injuries. This indicates a greater concern with lost time, and therefore productivity, caused by injuries than for the injured employees themselves.

The Bench Marks Foundation shares the concerns of the Department of Mineral Resources about the seeming correlation between high mineral prices, productivity and mine accidents, and an apparent correlation between increases in price and in accidents (Adams, 2011). Thus, Anglo Platinum reported that productivity levels suffered as a result of safety stoppages that resulted in the loss of approximately 161 200 ounces, of which close to 122 000 ounces were for non-fatality and localised stoppages. The Section 54 stoppages also had an adverse impact on the company's cash operating costs, resulting in an increase of approximately 2% above mining inflation, at 16% year on year, to R13 552 per equivalent refined platinum ounce. Last year Anglo Plat had 81 safety stoppages, almost three times more than the 36 safety stoppages it had in 2010, and also reported 12 fatalities compared to 8 in the previous period (Maoto, 2012).

The research team is generally concerned about the underreporting on the health effects of platinum dust and platinum salts (also known as platinosis), noting ongoing research into the impact of these dust particles on employees in catalyser and jewellery manufacturing plants in the USA, Britain and Europe. We are pleased to note that since Policy Gap 1, Anglo Platinum has included reference to the problem and to steps taken to mitigate it. According to a number of research reports, the complex salts of platinum are one of the most potent respiratory sensitising agents, having caused occupational asthma in more than 50% of exposed workers.

Substitution of ammonium hexachlor platinate with platinum tetramine dichloride in the manufacture of catalyst has controlled the problem in the catalyst industry. Ammonium hexachlorplatinate exposure still occurs in the refining process (Merget *et al.*, 1999). Green Health Watch reports concerns raised by Gerald Hurst in New Scientist about levels of platinum dust found on road surfaces in several

places in Great Britain. This dust emanates from the catalytic converters of cars (Green Health Watch, 2011).

According to Dr. Mohamed F Jeebhay at the Centre for Occupational and Environmental Health Research at the School of Public Health and Family Medicine at the University of Cape Town, as much as 25% of all adult asthma is work related. He states that work-related asthma remains under-recognised, poorly managed and inadequately compensated. Dr Jeebhay claims that platinum, chrome and nickel are all common causes of occupational asthma in developing countries, particularly among workers in refineries (Jeebhay, 2009).

The Bench Marks Foundation has also come across two Material Safety Data Sheets. One is from Jensen Dental dated 29 March 2010 (Jensen Dental, 2010) identifying the problems associated with metals such as platinum, rhodium, copper and manganese. The second one is from the US Department of Health and Social Services National Institute for Occupational Safety and Health, which also makes the link between platinum salts/dust and asthma (US Department of Health and Human Services, 1978).

The Bench Marks Foundation has, during the current round of research, come across numerous mineworkers in the Bojanala District who claim to have been boarded due to respiratory and lung function problems (Interviews with boarded workers in Ikemeleng and Marikana, August 2011). All these informants claim to have worked in extremely dusty situations in mine operations as well as processing plants. The Bench Marks Foundation has also found that medical staff employed in public health facilities in the Bojanala District report a high incidence of respiratory problems in the general public. The relationship between the road transport by truck and platinum dust levels in adjacent communities should be an area of further research. The high incidence of asthma, ear, nose, throat and lung ailments in the Bojanala District area may be attributed to poor air quality as a result of the smelters and dust fall-out, as a result of dust road traversed by mine vehicles and open cast mining and tailings. The Bench Marks Foundation is therefore concerned with more than the health and safety of mine employees, the concern stretches to the communities beyond the exclusion zone of the mines.

Also noted is the HIV/AIDS voluntary testing and the roll-out of anti-retroviral treatment to employees, sub-contracting employees and to spouses. We are, however perturbed by the continued failure of mining corporations to realise the links between HIV/AIDS, the living-out allowance and housing policy.

5.1.2.6 ENVIRONMENTAL IMPACTS

While Anglo Platinum's honesty in reporting incidents of emission exceedances and incidents of impacts on water is appreciated, the Bench Marks Foundation is concerned that the corporation reports only a 63% compliance with 688 conditions requiring legal compliance. It is concerning that Anglo Platinum's operations in the Bojanala District, most of which are long, well established operations, could still have a 37% non-compliance level. By all accounts the health and welfare status of the Bojanala District population is not good. The major problems include HIV/AIDS, drug resistant TB, TB and respiratory problems, alcohol and substance abuse, high levels of unemployment, substandard housing, rampant informal settlements and low income levels. Ironically, this is a region where communities are supposed to have benefited from mining for over 80 years (Rustenburg Platinum Mines was established in 1931).

5.2 Impala Platinum

5.2.1 Private and public personalities

Impala Platinum in its own words

Impala Platinum Holdings Limited (Implats), a leading global producer of platinum, produced 1.9Moz of platinum (approximately 25% of global supply) and 3.6Moz of platinum group metals (PGMs) for the 2008 financial year.

Implats' mining interests are located on the two most significant known PGM-bearing orebodies in the world: the Bushveld Complex in South Africa and the Great Dyke in Zimbabwe:

- In South Africa, these are located on the western limb of the Bushveld Complex (Impala Platinum and the Leeuwkop project) and on the eastern limb (Marula Platinum and Two Rivers Platinum). Impala and Marula are managed by Implats, while the Two Rivers joint venture is operated by Implats' partner, African Rainbow Minerals (ARM). Impala Platinum comprises Impala Rustenburg (mining and smelting operations) and Impala Springs (precious and base metals refining).
- In Zimbabwe, Implats operates Zimplats Holdings and has a joint venture with Aquarius Platinum in Mimosa Platinum. Zimplats is listed on the Australian Securities Exchange (ASX).

Impala Refining Services uses Impala Platinum's excess smelting and refining capacity to process the concentrate and matte produced by the various mine-to-market operations, as well as material purchased from other companies. Toll-refining is also undertaken on behalf of other companies. Implats is one of the largest auto catalyst recyclers in the world.

http://www.implats.co.za/cr/reports/2008/profile.htm

Impala Platinum is a subsidiary of Implats. Impala Platinum is situated on the Western Limb in close proximity to two communities the Bench Marks Foundation is working with, namely Luka and Chaneng. Implats also operates mines in Limpopo and Zimbabwe. Implats wishes to be the world's best platinum producing company, delivering superior returns to stakeholders relative to its peers.

Implats claims to uphold the following values:

- safeguarding the health and safety of employees and caring for the environment in which they operate;
- acting with integrity and openness in all that they do and fostering a workplace in which honest and open communication thrives;

- promoting and rewarding teamwork, innovation, continuous improvement and the application of best practice by being a responsible employer, developing people to the best of their abilities and fostering a culture of mutual respect among employees;
- being accountable and responsible for its actions as a Company and as individuals; and
- being a good corporate citizen in the communities in which they live and work (Implats, 2010 - 2011).

Implats claims to seek to achieve its vision of becoming the world's best platinum producing company and delivering superior returns to stakeholders relative to its peers by focussing on a clear three-tier strategy to achieve:

- mine safely and sustainably;
- achieve a 'zero harm' workplace;
- minimise the impact of operating activities on the environment;
- build respectful, constructive relationships with all relevant stakeholders;
- develop a strong pipeline of talent and skill;
- grow production and resources;
- undertake Brownfields and Greenfields exploration;
- develop organic growth opportunities;
- pursue acquisitions and strategic alliances/joint ventures (JV's);
- deliver on capital projects;
- maintain a low-cost ounce profile;
- apply disciplined capital investment criteria;
- execute rigorous cost control and operational efficiency to maintain the
 Group in the lowest quartile on the cost curve; and
- focus on improving productivity.

Implats claims to show great concern for cost containment, lower costs translate into higher profits and thus the fulfilment of the corporate ethic to maximise profits for shareholders. Their Chairperson notes: "I believe that there is a fundamental link between sustainable business practice, ethics, governance and the creation of long-term shareholder value" (Mokhele, 2011). Implats is therefore keen to qualify

stakeholders and limit the concept to those deemed 'relevant'. In their case then, sustainability seems to imply operational sustainability to a much greater degree than social and environmental sustainability. Issues of the environment, employee health and safety and community are therefore considered risks to be minimised if profits are to be maximised. This seems to fit Friedman's notion that the only legitimate CSR is the type of CSR which results in the maximising of profit.

In a couple of issues that will consequently be highlighted, the private and public personalities of Implats are being reflected.

5.2.1.1 SUSTAINABILITY

According to the Chairman of the Board: "Lost Time Injury Frequency Rates (LTIFR) remains too high. The safety performance of the Group remains a disappointment to the Board, notwithstanding the world-class safety performance of the Zimbabwean operations [Zimplats and Mimosa]".

The production and resource constraints that are being experienced at the Impala Rustenburg operations as the older shafts reach the end of their life, will be alleviated by the three new shafts currently under construction (shaft numbers 20, 16 and 17) (Impala Annual Report). The Bench Marks Foundation is concerned, in the light of the Aurora experience, that Impala Platinum might want to sell off these shafts to BEE juniors to avoid its environmental and social responsibilities at closure.

The long-term sustainability of the business will require the availability of various skills sets that are needed to underpin a mining operation. The South African and Zimbabwean education and training systems are currently failing to deliver the quality and quantity of suitably skilled persons for the Group to renew and refresh its labour force.

The Group's skills challenges are further compounded by the high prevalence of HIV/AIDS within the economically active age group of 15 – 49 years in the South African population. The average infection rate for the mining industry according to the Chamber of Mines, is estimated to be between 25% – 30%. The Group has already started to experience the economic impacts of HIV/AIDS through higher absenteeism and lower productivity at Impala Rustenburg.

The uncertain political and economic climate in Zimbabwe and the increase in the nationalisation rhetoric in South Africa are also challenges (Mokhele, 2011).

5.2.1.2 EMPLOYEE HEALTH AND SAFETY

Impala Platinum reports that the following employees died while at work during the Financial Year 2011. The research team extends sincere condolences to their families, friends and colleagues:

- Mr Motlhanke Maku died in a fall of ground accident on 7 July 2010 at Impala Rustenburg 4 Shaft;
- Mr Innocent Ndlovu died in an accident dealing with explosives, on 5
 September 2010 at the Mimosa Mine;
- Mr Alfiado Bacitela died in an equipment handling accident on 17
 September 2010 at Impala Rustenburg 11 Shaft;
- Mr Mankoene Nkhoaneng died after being overcome by methane gas on
 21 October 2010 at Impala Rustenburg 11 Shaft;
- Mr Gadeni Hlophe died in a fall of ground accident on 1 November 2010 at Impala Rustenburg 11 Shaft;
- Mr Mvesilo Mswedi died in an equipment handling accident on 20
 December 2010 at Impala Rustenburg 14 Shaft;
- Mr Michael Molokwane died in an accident involving an LHD on 25
 February 2011 at Impala Rustenburg 14 Shaft; and
- Mr Rui Wamba Tila died in a fall of ground accident on 25 June 2011 at Impala Rustenburg 5 Shaft (Implats, 2010 - 2011, p. 44).

5.2.1.3 HIV/AIDS

Implats estimates an HIV/AIDS prevalence of 23% among its employees. It would have been interesting to have figures by operation. Regrettably, 131 patients died in service due to AIDS-related illnesses (Financial Year 2010: 134), while a further 388 patients (Financial Year 2010: 281) applied for medical incapacity benefits and left the Group. Far more employees die from HIV-related illness than employees that die from mine accidents (Implats, 2010 - 2011, p. 44). It must be noted that HIV/AIDS levels are usually higher in surrounding communities than what they are on the actual mine site, because mineworkers have better access to corporate health facilities and HIV/AIDS programmes.

5.2.1.4 TUBERCULOSIS

In the Financial Year 2011, 350 new cases of pulmonary TB were detected (Financial Year 2010: 399), which is a rate of 6.12 per 1 000 employees. The high level of HIV/AIDS in South Africa exacerbates the incidence of TB as infected employees' immune systems are compromised, in turn increasing their risk of contracting TB. Seventy-seven (77) percent of newly diagnosed TB patients are HIV-positive (Implats, 2010 - 2011, p. 44).

5.2.1.5 ENVIRONMENTAL PERFORMANCE

Water

The Annual Report notes a reduction in the consumption of water, but says nothing about impact on surface-, ground- or atmospheric water (Implats, 2010 - 2011, p. 46).

Energy

The Annual Report discusses the increases in the price of electricity but says nothing about the group's energy footprint (Implats, 2010 - 2011, p. 46).

Emissions

Sulphur Dioxide (SO₂)

At Rustenburg SO_2 emitted per day for the year was 17.3 tonnes (Financial Year 2010), showing a deterioration in SO_2 emissions at these operations. The operations have investigated the cause of this deterioration in air quality at the smelter and the findings indicate that high sulphur content in the Merensky ore and inefficiencies in the abatement systems was the cause. The operations are working on restoring SO_2 levels to below 16 tonnes of SO_2 a day (Implats, 2010 - 2011, p. 46), which is too high given that in 2010 it was only 10.4 tonnes. The Bench Marks Foundation is of the opinion that the target of 16 tonnes of SO_2 represents a drop in standards. The Bench Marks Foundation remains concerned, as we were after Policy Gap 1, about the cumulative impact of the emissions for all the various operations of the many different mining companies within the relatively small geographical space of the Bojanala District.

Carbon Dioxide (CO₂)

Implats' total direct CO_2 emissions (from burning fuel such as coal, diesel, petrol and gases) during the Financial Year 2011 were 435 605 tonnes, an increase of 10% on the Financial Year 2010. Total indirect CO_2 emissions rose by 6% to 3.6 million tonnes year-on-year. The Group's Rustenburg operations accounted for approximately 72% of its total emissions in the Financial Year 2011 (Implats, 2010 - 2011, p. 46). The communities of the Bojanala District therefore suffer the highest levels of air pollution of all Impala's operations in Southern Africa. Given the spread of Implat's operations over the North West Province, Limpopo and Zimbabwe, further research is needed to determine why Rustenburg accounts for 72% of total emissions.

5.2.1.6 SOCIAL PERFORMANCE

Education and literacy

The group spent R14 million on Adult Basic Education and Training (ABET) during the financial year and 842 employees were enrolled for ABET. This implies that the group is spending R16 627.07 per learner on ABET with only a 70% pass rate, and no significant impact on illiteracy! Overall, the Group's average literacy level improved by 1% mainly due to ABET programmes, and as a result of their recruitment drives focusing on hiring employees who have completed their high school education. The most significant improvements were experienced at the Rustenburg operations where currently 57% of the workforce is literate opposed to 55% in the Financial Year 2010 (Implats, 2010 - 2011, p. 47). Implats awarded 70 fulltime bursaries, 451 individuals benefited from their apprenticeship programme and 23 members of the group participated in leadership programmes with the Gordon Institute of Business Science (Implats, 2010 - 2011, p. 47).

5.2.2 The experienced personality of Impala Platinum

"The only thing Impala has ever done for us since coming here to Chaneng in 1968 is to tar one road for us" says Molefi, a sixty year old resident from Chaneng. He continues: "...ever since I was 18 years old I have been fighting for someone to build a community hall here, I am afraid that I will die before my dream is realised".

Photo 7: Impala platinum billboard advertising paved road in Chaneng



The experienced personality (perceptions of communities) will now be reflected in highlighting the burning issues of Mine Fatalities and Environmental Impacts.

5.2.2.1 MINE FATALITIES

While the Group reports an improvement in safety, the number of fatalities for its Rustenburg operations (7 fatalities at Impala Rustenburg) is unacceptably high, more so because Rustenburg Impala is a long established operation having commenced in 1968. The Bench Marks Foundation reported a number of shortcomings that contribute to poor health and safety in mines in Policy Gap 1 (Bench Marks Foundation, 2007). Unfortunately, it would seem as if very little has changed at Rustenburg Platinum since then.

The causes of poor safety:

- Cost containment: While all the mines under review pride themselves on cost containment, if it is achieved at the expense of mine health and safety it becomes problematic. However, we would need more information on cost cutting to support this assertion.
- The use of sub-contractors: Implats, in contrast to Anglo Platinum, has
 actually increased the number of sub-contractors in its employment (the use
 of sub-contractors and out-sourcing are usually justified on the grounds of
 cost containment).

Table 5: The use of contractors by Implats vs full-time employees (Implats, 2011, p.1)

Employees in service	2011	2010	Variance %	
Own	39 624	38 317	3.3%	Increase
Contractors	17 504	15 819	10.7%	Increase

From having visited both Ngezi and Mimosa mines in Zimbabwe, the Bench Marks Foundation researchers can say with confidence that the bulk of subcontracted labour used by Implats will be on its South African operations, notably Rustenburg and Marula in Limpopo. Both NUM and the Bench Marks Foundation have pointed out that the use of sub-contracted labour compromises mine safety. Sub-contracted labour is usually poorly paid, poorly trained and educated, and poorly accommodated. Sub-contracted labour also lacks long term familiarity with the work environment and culture, being highly mobile between jobs. Therefore, sub-contracted workers compromise the health and safety of other workers.

Photo 8: Impala Platinum ore train running up and down a line that has numerous unguarded rail/road crossings



There seems to be very little concern for public safety in communities in close proximity to mine operations in the Bojanala District, from Chaneng in the far west to Marikana in the east. All rail crossings are unguarded and signage is generally poor. We are told that all of these crossings are high

accident zones. Any CSR programme worth its salt would have invested in bridges or booms. Impala has been in the region of Chaneng and Rasimone since 1968 and has never thought of securing road/rail intersections.

Photo 9: One of the many unguarded/unbridged rail crossings affecting Luka, Rasimone and Chaneng



• Low levels of worker literacy: Forty-three (43) percent of Implats workers remain illiterate. By its own admission the group's literacy level in Zimbabwe is 100%. Clearly the illiterate workers are concentrated in the South African operations. The Bench Marks Foundation notes with dismay that the poor literacy situation at Implats mines has not improved much since 2007. We then commented on the very high amounts per capita spent by the group on ABET yielding little results; we are therefore surprised that little has changed. Illiterate workers are unable to read health and safety signage, and are unable to read first aid and health and safety manuals, notices and literature. In the interactions with the communities we work with in Bojanala, we constantly hear the complaint that the mines employ very few locals (despite the protestations by the mines to the contrary).

The youth in the district are particularly perturbed by mining companies refusing them employment because they do not have the right subject

combinations (maths and science) or adequate marks in these subjects, despite having matriculation certificates. Secondly, it is argued that they do not have experience in mining. The Bench Marks Foundation wonders whether the 43% illiterate employees and the sub-contracting employees have maths and science to show on their CV's? This anomaly will do damage to the relations between mines and communities in the area, and will also ultimately damage the public image of a corporation like Implats.

"When we approach the mine to give us jobs, they either tell us that we lack experience or that we are not qualified, that we need maths and science. Yet many of their workers are illiterate, at least we have matric." (Phokeng Youth).

- Poor living conditions of mineworkers: Sub-contracted workers cannot afford to become part of home ownership schemes. They lack job security because they are not permanently employed. Therefore, sub-contracted workers will find themselves in informal settlements, in backyard shacks or in appallingly poorly maintained and managed group/hostel accommodation provided by the sub-contract that employs them. Poor nutritional levels, lack of healthy entertainment and recreational facilities, lack of potable water and electricity in many instances mean that these workers are not properly reproduced physically, spiritually and psychologically on a daily basis. They frequently visit shebeens, use sex-workers and do not eat or rest properly. Clearly all these factors will impact on their ability to work effectively, to concentrate and to look out for danger in a very dangerous environment.
- Productivity bonuses: The Bench Marks Foundation researchers had the opportunity to talk to shop stewards and team safety officers at Impala Rustenburg. In the discussions it became clear that the drive for productivity induced by production bonuses is compromising worker safety. There is a high turnover of team/shift safety officers, because teams chasing bonuses report such officers for compromising productivity when they stop work due to safety concerns about the area in which the work takes place. The recent strike by 13 000 workers at Impala Platinum over the discriminatory nature of

these bonuses come as no surprise to the Bench Marks Foundation; an increase in transactional sex in all the mines around Rustenburg is reported, particularly towards pay-day. We believe that the productivity bonuses also contribute to the spiralling sex work that is taking place on the mines in the Bojanala District.

5.2.2.2 ENVIRONMENTAL IMPACTS

Emissions

The Bench Marks Foundation welcomes the honesty of corporations in admitting exceedances of the limitations on SO₂ and CO₂ emissions. However, admitting the emissions is insufficient if there are no legal and regulatory consequences. It is equivalent to a person admitting a crime, but there are no legal consequences. We note that the regulatory authority, the Department of Minerals Resources (DMR), is amiss in not instituting legal proceedings against those that contravene regulations. The research team also notes the backlog in the issuing of Air Quality and Water Use Licences. This indicates severe incapacity in both the DMR and the departments of Environmental- and Water Affairs.

The Bench Marks Foundation has long argued that the DMR needs to unbundle various responsibilities/mandates that it is clearly incapable of carrying out. It must revert these to the proper and more relevant departments, such as the departments of Environmental- and Water Affairs (in the case of EIA's, Air Quality Licences, Water Use Licences, etc.), the Department of Labour (regarding labour matters) and other relevant departments regarding Social and Labour Plans.

5.3 Lonmin

5.3.1 Private and public personalities

Lonmin Platinum in its own words

We are Lonmin, a primary producer of Platinum Group Metals. We create value by the discovery, acquisition, development and marketing of minerals and metals.

We respect the communities and nations that host our operations and conduct business in a sustainable, socially and environmentally responsible way.

We have Mines in South Africa from which ore mined and concentrated before being processed through smelter and refineries to deliver finished metals to the market.

Our mission:

- To grow and build our portfolio of high quality assets;
- To deliver the requirements of the South African broad-based socioeconomic Mining Charter and we welcome the opportunity to transform our business; and
- To build a value-based culture, which is founded on safe work, continuous improvement, common standards and procedures, community involvement and one that rewards employees for high performance.

Our Values:

- **Zero Harm:** We are committed to zero harm to people and the environment;
- Integrity, Honesty & Trust: We are committed ethical people who do what we say
 we will do;
- **Transparency:** Open, honest communication and free sharing of information:
- Respect For Each Other: Embracing our diversity enriched by openness, sharing, trust, teamwork and involvement;
- **High Performance**: Stretching our individual and team capabilities to achieve innovative and superior outcomes; and
- **Employee Self-Worth:** To enhance the quality of life for our employees and their families and promote self esteem.

Source: http://www.careerjunction.co.za/companies/lonmin-platinum-26410

Lonmin's opening statement to its Sustainable Development Report for 2010 reads: "We respect the communities and nations that host our operations and conduct business in a sustainable, socially and environmentally responsible way" (LonminPLC, 2010).

This leads into the corporation's mission statement (LonminPLC, 2010, p. 1) which is:

to grow and build its portfolio in high quality assets;

- to deliver the requirements of the South African broad-based Mining Charter and it welcomes the opportunity to transform our business; and
- to build a value based culture, which is founded on safe work, continuous improvement, common standards and procedures, community involvement and one that rewards employees for high performance.

Lonmin states (LonminPLC, 2010, p. 1) that it will be successful when:

- Its employees live and work safely and experience the personal satisfaction that comes with high performance and recognition;
- Its shareholders are realising a superior total return on their investment and support its corporate sustainability values;
- the communities in which they operate value their relationships; and
- Lonmin is meeting its commitments to all business partners, suppliers and contractors; and
- Partners and customers support the Lonmin Charter.

The Lonmin report then identifies the following values: zero harm, integrity, honesty and trust, transparency, high performance and employee self worth (LonminPLC, 2010, p. 1).

This is the self image that Lonmin has, and its actions out there seek to convince the public that it lives up to this vision and these objectives and values.

The report summarises the achievements and challenges of the corporation for 2010 as follows.

Table 6: Lonmin's achievements and challenges

Achievements	Challenges	
Development of an integrated Safety	Failure to eliminate fatal accidents: the	
Strategy reflecting a shift to a more	company had three mine accident fatalities	
proactive approach	during 2010; in its latest 2010 Interim report	
	the company reports six fatalities already	
	since the start of 2011 (LonminPLC, 2011,	
	p. 2)	
Development of a revised housing	Delays on the housing project slowed down	
model including earmarking	the delivery of Lonmin's Social and Labour	
accommodation for women in mining	Plan commitments	
Developing an integrated real time water	To secure an adequate supply of water to	
balance system to measure and monitor	sustain and expand Lonmin's operations	

Achievements	Challenges	
water flow throughout the Company		
School attendance and performance in	Targeting the GLC with tertiary education	
the Greater Lonmin Community (GLC)	bursaries	
have improved partly as a result of		
Lonmin investments in education and		
nutrition programmes		
43.3% of Lonmin managers are from	The effectiveness of Lonmin's training and	
designated groups, exceeding Lonmin	development initiatives	
targets for 2010		
Lonmin has reduced its total fresh water		
intake, per unit of production, by 25%		
compared to the 2007 baseline		
Lonmin is managing its risks associated		
with HIV/AIDS	Dramating average of anargy officiansy	
Lonmin's governance of sustainability	Promoting awareness of energy efficiency	
has focussed on making informed decisions based on improved data		
collection and reporting		
Lonmin has refined its approach to	To reduce the amount of ground level fugitive	
identifying and prioritising its principle	SO ₂ emissions by 40% by 30 September	
sustainability risks	2014	

Source: LonminPLC, 2010, p. 23

5.3.2 Lonmin's experienced personality

Lonmin experienced violent community protests at its Marikana operations in 2011, an indication of communities frustrated and angry with the mining company. The following issues can specifically be highlighted:

5.3.2.1 WORKER HEALTH AND SAFETY

The Bench Marks Foundation finds the levels of fatal accidents at Lonmin unacceptable and the fact that the number of fatalities have doubled since January 2011 is worrisome. The Foundation notes the high reliance on contract workers, and as for our comments concerning fatalities at Impala Platinum, we consider this a cause of poor safety in mines. Lonmin employs 23 915 employees permanently, the majority of them at Marikana. In addition, Lonmin has 9 131 full time contractors which represent a drop of slightly more than 1 000 from the 10 497 contractors employed in 2009. Thus, roughly one third of employees are sub-contractors (or contractors as Lonmin refers to them).

Lonmin outlines extensive steps to reduce fatalities and injuries at its operations (LonminPLC, 2010, pp. 23-26). However, none of these steps refer to the

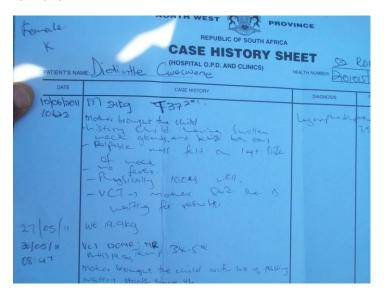
contribution of the living conditions of workers and how these conditions impact on worker health and safety (the Bench Marks Foundation's comments on Impala Platinum above are also applicable here).

The visits by the Bench Marks Foundation research team to Marikana convince us that the residential conditions under which Lonmin and other mine company employees live are appalling. This can be seen in the proliferation of shacks and informal settlements, the rapid deterioration of formal infra-structure and housing in Marikana itself, and the fact that a section of the township constructed by Lonmin did not have electricity for more than a month during the time of our last visit. At the RDP Township we found broken down drainage systems spilling directly into the river at three different points. Residents informed the Bench Marks Foundation team that they have been reporting the matter to both the Local Government and Lonmin for five years now, and it still remains unaddressed. The Bench Marks Foundation team interviewed residents living next to the spills and found that children showed symptoms of chronic illnesses associated with such spills.

Photo 10: One of several sewage spills in the RDP village next to Lonmin Karee mine, Marikana



Photo 11: Case history file for child chronically ill from sewage spill next to her house, Marikana



The Bench Marks Foundation is also concerned about the appearance of bilharzia warning signs appearing next to surface water streams in Marikana. The presence of bilharzia in the surface water in the Bojanala District is a direct consequence of informal settlements, a major cause of which is the housing policies of mining companies, and failure to maintain and repair sewage and drainage systems by Local Government. Until mining corporations realise that the physical, spiritual, mental and recreational needs of their employees are important to mine safety, zero harm and zero fatality objectives will remain unrealised.

At the local Lonmin supported school in Marikana, the research team found several blocks of old asbestos class rooms still in existence. A major rail crossing in the centre of Marikana remains unguarded (the Bench Marks Foundation found several similar unguarded rail crossings in other villages and in Rustenburg town itself). These crossings are reportedly high accident zones and are mainly used by the mining companies operating in Bojanala District.

Photo 12: Lonmin CSR Signage at school with asbestos classroom blocks (see following photos)



Photo 13: Asbestos classroom blocks Marikana



Photo 14: Unguarded rail crossing, Marikana



Photo 15: Failed multi-million rand Lonmin hydroponics project



5.3.2.2 LONMIN AND LOCAL EMPLOYMENT IN MARIKANA

Production at two shafts of Lonmin's Marikana platinum mine was halted by protests from nearby community members who demanded that the company employ its residents (Wessels, 2011). On May 24 2011, Lonmin dismissed 9 000 workers at its Marikana operation in South Africa after a union dispute prompted unsanctioned walk-offs. Lonmin reported that the 'unprotected industrial action' has disrupted output at the platinum operations since the night shift of May 17 (Reuters, 2011). The implication of this mass dismissal is that workers who participated in the housing scheme of the mine also lost their houses. After the researcher's interaction with the local community, we are also not surprised that violent protests broke out in Marikana directed against Lonmin with the major demand being employment for local people.

5.3.2.3 LONMIN CSR PROJECT IN MARIKANA

The Bench Marks Foundation is also concerned about the poorly planned and executed multi-million rand Lonmin hydroponics project near Marikana. The project provided work for about 120 people from Marikana, but it is claimed by the community that an alleged dispute between the company and the sub-contractor who managed the project, led to its collapse. The research team visited the abandoned project and found, despite the state of the art equipment installed, that it was in wrack and ruin.

Photo 16: Abandoned multi-million CSR project in ruins



Photo 17: Ruined Lonmin CSR project



5.3.2.4 THE IMPACT OF MINING ON COMMERCIAL AGRICULTURE IN THE MARIKANA AREA

This specific research setting for the review of the impact of mining on commercial farming is adjacent to the mining operations of Lonmin, Aquarius and Theresa Minerals (near Mooinooi). The area has more or less 90% white and 10% black farmers on both sides of the N4 and Old Pretoria Road (most of the remaining farming activities are to the north of the N4). There are also four black communities in the area, namely Maumong, Rankelentjane, Thlapa and Wonderkop.

A summary of the main findings will consequently be given, categorised according to the impact of mining on the three main dimensions of development.

Economic dimension

The most important economic impact is – as already indicated - that the mine buys more and more property and productive land. One problem in the area is that some of these bought-up properties are now unproductive units and some just serve as a breeding ground to social problems, for example squatters. On the other hand, the mining company now also isolates and alienates farmers from a broader united and consolidated farming unit; one farmer states that "[f]hey [the mine] buy everything around you, and you then become like an island...". Such an isolated farm now very easily becomes the concentrated target of people (and birds!) that 'steal'/pick the crop, especially in the case of sunflower. Farmers also mentioned the disturbing issue of people hunting with dogs in such areas.

In relation to the above-mentioned matters, more than one farmer informed the research team about the inevitable 'undermining' and devaluation of your property due to this 'isolation strategy'. A respondent argues: "Who is going to buy your farm when there is a mine dump on the one side and a slime dam on the other side...?" In the long run, farmers do not have any other option than to sell to the mining company.

Although hesitant and careful, participants were strongly of the opinion that 'dodgy deals', corruption and nepotism on the side of mining companies in the area are the order of the day regarding certain transactions.

Environmental dimension

Environmental degradation goes like a golden thread in the area; in fact, the situation seems even worse than more than five years ago.

With the expansion, more and more slime dams are being built adjacent to the farmers, and even on their properties. This situation has of course an influence on the quality of surface water. Regarding water responsibility, it just seems as if mining companies are passing the buck. Lonmin, Aquarius and Theresa Minerals own basically 90% of the Buffelspoort Dam; this water is earmarked for agricultural use. Farmers are of the opinion that – in the long run – it would be better if the mines buy out the last small farmers adjacent to the dam and then utilise the water for industrial

(mining) purposes. Mines are currently getting water from other sources (bore holes and Rand Water) that might also be questionable in terms of water licences. The Sterkstroom River is as a consequence of poor water management and responsibility, especially from Lonmin, in a terribly polluted state and farmers downstream cannot use the water any more. Slime dams, sewerage from the squatter camps and non-functional sewerage systems from RDP houses and even the police station exacerbate the problem.

A black farmer complained about the extremely poor condition of the gravel roads that lead to his crops, due to the usage of those primitive roads by the heavy machinery of the mines. According to Klaas (not his real name), it is merely impossible to use the roads with your normal 'bakkie' (researchers saw the damage to his 'bakkie'). Up to now, the mine shows no intention to fix the roads. Air pollution remains a huge problem; this problem is more evident during certain periods of the year when it is more dry, dusty and windy, especially when the wind blows from a southerly direction.



Photo 18: Ruins of farms are plentiful around Marikana as agriculture retreats before mining

Social dimension

One of the major social 'illnesses' of the area, except for other social problems going with the isolation-effect (for example safety, deteriorating community dynamics, etc.), is the establishing of squatter camps on unproductive land (now owned by the mine) and even on the property of farmers. From a demographic point of view, the population is increasing at a rapid pace and there is literally on a daily basis an influx

of people, many of course immigrants (documented as well as undocumented). Social problems that stem from a situation like this are numerous and inevitable (Cronjé & Chenga, 2007); respondents in the interviews and focus groups confirmed crime (theft, robbery and murder), rape and prostitution, social disintegration (in terms of family structures, other institutionalised structures, for example schools and churches, unemployment, poverty, etc.) and communicable diseases like TB and HIV/AIDS.

The so-called sleeping-out allowance (where the mine pays workers an amount for 'supposedly' decent housing instead of the hostel system) was also highlighted by key informants as hugely problematic. Workers take the bare minimum of the allowance, stay in shacks and now have more money, either to send home as remittance or simply for local entertainment in the form of alcohol and women.

The consultation process that the mine is supposed to follow regarding important issues (for example to explore on a farmer's land) is very poor and mostly actually non-existent. The mine will need to go a long way to substantiate and give real meaning to the issue of Free, Prior and Informed Consent (FPIC). The traditional tendency of the mine to make use of 'sophisticated' consultants regarding Social and Labour Plans (SLP's), Environmental Impact Assessments (EIA's) and Feasibility Studies is continuing.

Some of these reports and assessments are highly questionable, and some others are being kept as a secret. One farmer revealed that the sustainability/feasibility report of a mining company in the area describes his farm and the productive and sound farming practice thereof as "...a few dilapidated buildings with no meaningful economic activities going on..." The specific report was compiled by a consultancy agency from Johannesburg, Golder Associates in 2011 (Golder Associates, 2011).

Regarding social projects, the concept of sustainability is unfortunately the missing link in the equation. Efforts in this regard are characterised by hidden agendas, untransparency, corruption, poor management and false promises. Research subjects specifically pointed out the cases of the infamous Israeli 'Gilli' project, as well as the Affordable Life Solution for Africa (ALSA) project in the area under

discussion. ALSA is an investment initiative from the Netherlands for housing, but the project does not seem to get off the ground, although the land is already paid for. Some respondents made allegations that Lonmin is resisting the EIA of the project. Participants also brought up the issue of training in the area; more trained and educated people can logically lead to a more developed and sustainable environment.

Lastly, the question of poor infra-structure in the vicinity of the mine was echoed by most respondents. In this regard they refer specifically to poor roads (already mentioned), electricity problems and no telephone lines in certain areas.

What struck the research team after having dealt with the farming communities is that not much has changed since the 2004/5 investigation in the area or the Policy Gap Research in 2006/7. Even more alarming, is the huge amounts being reflected by companies for corporate social investment (CSI) and corporate CSR; unfortunately, very little of that expenditure could be picked up from this survey.

It thus seems that corporate citizenship (CC) and sustainability are currently still illusions on a far horizon and that companies – despite good business – unfortunately cannot claim to have the very important and priceless 'Social Licence to Operate'. In addition, it must be stressed categorically that government services in the area are in general appalling; to make sustainability a reality to some extent, they (government) must also 'come to the party' and act as socially responsible citizens.

5.4 Xstrata

5.4.1 Public and private personalities

Xstrata in its own words:

We are one of the world's largest mining and metals companies - a major producer of seven commodities used in everything from constructing buildings and delivering electricity to developing jet engines and mobile phones. We operate in more than 20 countries and employ more than 70 000 people globally.

But our business has grown rapidly from small beginnings a decade ago. Over that time we have retained a uniquely decentralised management structure that gives our people responsibility and authority at a local level, encouraging innovation and an entrepreneurial spirit and creating strong links between our operations and local communities.

Xstrata Alloys

One of the world's largest producers of ferrochrome and vanadium used in the steel industry.

Xstrata Coal

The world's largest exporter of seaborne thermal coal used to generate electricity and one of the largest producers of coal used to make steel.

Xstrata Copper

The world's fourth largest global copper producer and a leading recycler of copper and other metals.

Xstrata Nickel

One of the world's largest and producers of nickel and cobalt used in a wide range of industry applications.

Xstrata Zinc

A leading producer of zinc used to galvanise steel and lead used in large batteries.

Xstrata Technology

A provider of technical expertise to the global mining industry to improve efficiency and environmental performance.

Source: http://www.xstrata.com/about/at-a-glance/

A major problem with the Xstrata sustainable development report is that it conflates all its operations across the planet (Canada, the USA, Europe, South America, Africa and Australia) into one single report. This makes it extremely difficult to obtain a clear picture of its CSR programme in the Bojanala District of the North West Province specifically.

According to Xstrata, its mission is to grow and manage a diversified portfolio of metals and mining businesses with the single aim of delivering industry leading returns for its shareholders. Xstrata states that it can achieve this only through genuine partnerships with employees, customers, shareholders, local communities and other stakeholders, which are based on integrity, co-operation, transparency and mutual value-creation (Xstrata, 2010, p. 1).

Xstrata states that its businesses maintain a meaningful position in seven major international commodity markets: copper, coking coal, thermal coal, ferrochrome, nickel, vanadium and zinc, with additional exposure to gold, cobalt, lead and silver. The Group also comprises of a growing platinum group metals business, iron ore projects, recycling facilities and a suite of global technology products, many of which are industry leaders. Xstrata's operations and projects span 20 countries (Xstrata, 2010, p. 1).

Xstrata further claims, that by operating to leading standards of health, safety and environmental performance, contributing to the development of sustainable communities and engaging with its stakeholders in two-way dialogue, regardless of the location, enhances its corporate reputation and is a source of competitive advantage. It seeks to balance social, environmental, ethical and economic considerations in how it manages its businesses (Xstrata, 2010, p. 1). Xstrata creates 'sustainable value' for its shareholders by delivering transformational growth and by applying operational excellence to its portfolio (Xstrata, 2010, p. 1).

This report is concerned with challenges faced by Xstrata's South African operations. Xstrata Alloys is the world's largest producer of ferrochrome, a leading producer of primary vanadium and has a growing platinum group metals business. Xstrata Alloys also owns carbon operations which supply key raw materials to its ferrochrome smelters. Xstrata Alloys' operations are based in South Africa (Xstrata, 2010, p. 4).

As part of the reflection of their private and public personality, the Xstrata group claims the following achievements:

- 20% reduction in total recordable injuries to 7 per million hours worked;
- 10% reduction in lost time injuries to 1.9 per million hours worked;

- three fatalities at managed operations;
- zero category 3, 4 or 5 environmental incidents for first time;
- greenhouse gas emissions increased by 12% as production levels rose;
- recycled water use rose by 11%;
- voluntary corporate social involvement of \$84 million to support communities;
- 20 major growth projects in implementation, representing \$18 billion investment;
- net earnings of \$5.2 billion and record real cost savings of \$541 million; and
- Dow Jones Sustainability Index Sector Leader for fourth consecutive year (Xstrata, 2010, p. 2).

It is very difficult to disaggregate the above information into country specific, province specific, district specific and operation specific information.

The CEO of Xstrata, Mick Davis reports that, "...three people lost their lives at our managed operations. A further seven people were fatally injured in two incidents at non-managed joint venture operations during the year. Already in 2011, four people have been fatally injured at our operations" (Davis, 2011, p. 9).

Referring to the intended audience of its report, Xstrata claims that: "Our sustainability reports provide a broad range of information about our sustainable development policies, practices and performance. They are aimed primarily at existing and prospective shareholders, as well as socially responsible investment analysts and investors. Other audiences include governments, inter-governmental bodies, industry organisations, trade unions, employees and their families, communities associated with our operations, contractors and contracting partners, development and non-governmental organisations (NGOs), suppliers, customers, joint-venture and business partners and the media" (Xstrata, 2010, p. 15).

Because Xstrata conflates all its information into a single global sustainable development report, it is difficult to analyse and make location specific findings. This contradicts the claim of accessibility made in the above reference to the audience of the report. This inaccessibility is further compounded by the fact that the document

only appears in English, is circulated via Internet or hardcopy available at Xstrata country offices, and is not directly distributed to the components of the claimed audience. The problems associated with report distribution are common to the reports of all the corporations reviewed in this study.

Consequently, two issues linked to the private and public personality, will be put to the fore.

5.4.1.1 XSTRATA'S HIV/AIDS PROGRAMMES

Xstrata Alloys and Xstrata Coal, the group's businesses operating in Southern Africa, claim to have 100% targets for their HIV/AIDS programmes. Hundred (100) percent of employees and contractors know their HIV status and 100% of HIV-positive employees and contractors are enrolled in treatment.

A broad range of programmes that are designed to move it closer to achieving the 100% targets are in place. These include:

- community initiatives such as improving access to healthcare, working with traditional healers and conducting a door-to-door outreach programme, which encourage HIV-positive employees and contractors and their dependents to take up and remain in appropriate treatment programmes;
- voluntary HIV testing and counselling all employees and contractors receive time off from their shift to participate in annual health assessments, provided by an independent organisation;
- access to free healthcare and treatment through easily available channels for all HIV-positive employees and contractors and their dependents;
- Xstrata Coal SA has implemented the 'I know the way to live!' initiative developed by Re-Action! (a professional services agency for health and sustainability); and
- eradication of single sex hostels for mineworkers.

These initiatives are complemented by education and awareness raising programmes, and are undertaken in close partnership with unions and employees' families and partners. Training and education programmes cover a broad range of health issues in addition to HIV and AIDS (Xstrata, 2010, p. 51).

5.4.1.2 EMPLOYMENT

Xstrata states that "[w]e believe it benefits the community and Xstrata to have local management and to employ local expertise in the regions where we operate. Local people understand the culture and regulatory environment and help us operate efficiently and with sensitivity to our host country. The employment we create for local people is often a significant component in the local economy... We filled 80% of new positions, including senior management positions, in 2010 with local people, defined as those already living in the geographic region where the job is primarily based. Sites in remote regions with high unemployment have targets and structured programmes to help maximise the employment levels in local communities. Targets range from 65% to 100% of the workforce and, where appropriate, sites also have specific targets to increase the proportion of people employed from neighbouring indigenous communities" (Xstrata, 2010, p. 58).

5.4.2 The experienced personality of Xstrata

A couple of burning issues through the eyes of the community will consequently be highlighted.

5.4.2.1 HIV/AIDS IMPACTS ON MINEWORKERS AND COMMUNITIES

In February 2011, NUM alleged that Xstrata was firing workers on grounds of their HIV/AIDS status from one of its South African Collieries. This seemingly has had an impact on communities and mineworkers from the Tlhabane Township of Rustenburg. No doubt, mine workers at Xstrata's chrome operations in Rustenburg were informed of the alleged dismissals at the Tweefontein Colliery in Mpumalanga. It is claimed by informants that Xstrata employees are now afraid to go for HIV/AIDS testing and treatment at mine health facilities and that they frequently visit government facilities instead. Residents of the Tlhabane Township resent the sudden increase in patients at the government facilities and the resultant increased in demand for anti-retroviral (ARV) treatment. This has the potential of unleashing xenophobic attacks in the area.

"When we get to the government clinic the lines are long, and full of 'foreigners' who are mineworkers from Xstrata. They refuse to go to the mine clinic, instead they

come here, and often we find the clinic running out of supplies...," Interviewed community member from Tlhabane.

Xstrata Coal South Africa Accused of Sacking HIV-Positive Miners

A dispute has arisen in South Africa between ICEM affiliate National Union of Mineworkers (NUM) and Xstrata Coal over the apparent discharge of 12 HIV-positive miners. The miners were first sacked last fall from their jobs at the Tweefontein collieries in Mpumalanga province, but the NUM interceded on their behalf before the Commission for Conciliation, Mediation, and Arbitration (CCMA) and won reinstatement to their jobs.

But in mid-February, Xstrata Coal South Africa informed the NUM that it would re-sack the 12 and appeal the CCMA's decision to a labour court. At issue is whether or not Xstrata knew of their HIV status through a joint NUM-Xstrata Voluntary Counselling and Testing (VCR) programme that is strictly confidential. Hundreds of Tweefontein miners were tested through the programme in October and November 2010.

It is uncertain if Xstrata Coal gained access to results of the screenings, but the NUM alleges that the company does know the results. A private service provider was contracted to do the screenings and results are supposed to be shared only with the individual.

NUM Highveld Regional Secretary Paris Mashego accused the company of dragging backward the campaign to test for the pandemic and said the NUM will continue to press for the real motive behind Xstrata's reversal. Late this week, NUM delegates and shop stewards from many Xstrata worksites will descend on the company's Johannesburg headquarters to manifest against the injustice.

"What we experience here with Xstrata is the same thing our Australian comrades of the CFMEU experience with the company," said Mashego. "They cannot accept official rulings and must always appeal their losses in order to get their way. Only in this case, there is something fundamentally wrong, the anonymity and confidentially of HIV-positive workers."

The National Education, Health, and Allied Workers' Union (NEHAWU) of South Africa also responded negatively to Xstrata Coal's alleged actions. "This ghastly and barbaric behaviour by a company is a clear sign of how some big companies are failing to abide by the ILO or the OECD Codes of Conduct by violating workers' rights and working conditions.

"This alleged discrimination against workers who are HIV-positive is a huge blow to the government's fight against AIDS," stated a NEHAWU spokesman, "because it sends a message to those who have the disease that they will lose their jobs if they come out."

Xstrata Coal South Africa, 20% owned by African Rainbow Minerals Ltd., operates 11 coal mines in South Africa, and is currently developing three new projects – the Arthur Taylor Colliery Opencast Mine (ATCOM) East development, the Goedgevond coal project, and optimisation of the Zonnebloem project, all in Mpumalanga province. Together with the Tweefontein optimisation project now nearing completion, the projects will eventually produce 90% of the company's South African coal output. (ICEM, 2011).

5.4.2.2 EMPLOYMENT OF LOCALS

Members of the community contest the claim by Xstrata that it employs almost exclusively from local communities. According to the residents of Tlhabane Township, Xstrata is heavily reliant on contract workers. This reliance has resulted in a squatter camp mushrooming on a swampy piece of land that separates Tlhabane from the Xstrata operations. The Tlhabane residents claim that the occupants of this informal settlement are foreigners. The Bojanala District has seen frequent outbreaks of xenophobic attacks over the years.

5.4.2.3 GENERAL

In Policy Gap 1 in 2007, the Bench Marks Foundation posted a number of photographs showing poor environmental management of water and waste behind Xstrata operations. We are pleased to note significant improvement of the water management, waste management and security at both sites.

5.5 Aquarius

5.5.1 Private and public personalities

Aquarius Platinum Ltd in its own words: the Aquarius model & strategy

Business model

Aquarius Platinum has been uniquely successful in bringing into operation small, shallow, relatively low-grade PGM deposits using innovative technologies and mining methodologies. The Company has developed a clear set of differentiators which give it a significant competitive advantage over larger conventional PGM producers which historically have tended to exploit the deeper, more capital-and labour-intensive PGM deposits in South Africa.

Aguarius' fundamental differentiators include:

Mechanised mining techniques, which are capital rather than labour intensive and bring with them a higher degree of safety, lower power requirements and other innovations in design, mining and processing which are now being emulated by some of the larger industry players.

Mining of shallow PGM deposits via decline shafts which require a fraction of the capital cost of more conventional vertical shafts.

Contract mining and processing, which brings with it "bought-in" expertise and resources, training capability and procurement power, allowing for a leaner and more cost-effective structure and greater flexibility.

Selling concentrate directly to two customers on life-of-mine contracts, thereby eliminating the significant financial and technical risks associated with the setting up and running of smelting and refining facilities, and the need for marketing infrastructure.

Low overhead structure, from exploration to operations, management and corporate financing.

Access to international capital markets through its listings on the ASX, LSE JSE and Level 1 ADR in the US.

Strategy

Aquarius has identified several strategic imperatives to facilitate the delivery of shareholder value in the face of uncertain short-term market conditions and a challenging operating environment. These are:

To optimise costs and efficiencies at existing operations in order to improve or at least maintain the position of these mines on the cost curve.

To seek growth through organic expansion or the acquisition of PGM properties which are:

- Contiguous with existing operations and capable of exploitation through existing infrastructure at low capital cost.
- Relatively shallow, primarily UG2 ore bodies which lend themselves to the Group's established mechanised mining techniques.
- To steadily grow production from current levels to the extent that it can be done profitably, while not hesitating to cut loss making production.
- To evaluate the acquisition of other PGM companies with caution, in terms of earnings accretion rather than potential increases in production.
- To remain a focused primary PGM producer, with a continued focus on southern Africa.

Aquarius is committed to functioning as efficiently as possible, containing costs and maximising profit for the benefit of its shareholders while always remaining mindful of its stakeholders, including employees, the communities surrounding its operations, business partners and suppliers.

Of paramount importance is the commitment to conduct our business safely, to cause 'zero harm', to respect the communities in and around our operations, to rehabilitate the land on which we have mined and to interact with the relevant stakeholders with respect.

Source: http://www.aguariusplatinum.com

Aquarius' primary listing is on the Australian Securities Exchange (ASX). The company has secondary listings on the main market of the London Stock Exchange (LSE) and the main board of the JSE Limited (JSE). Aquarius' primary South African interests – the Kroondal, Marikana, Everest and Blue Ridge platinum mines – are held by its wholy-owned subsidiary, AQPSA. Aquarius also has a 50% interest in the Mimosa Platinum Mine in Zimbabwe, in partnership with Implats, which is jointly managed. The Group also has 50% stakes in two tailings retreatment plants, CTRP and Platinum Mile (Aquarius, 2010, p. 14).

Some specific issues regarding the private and public personality will now be presented.

5.5.1.1 RISK MANAGEMENT

Aquarius has adopted a continuous review process whereby strategic risks are identified, monitored and actively managed through the allocation of appropriate resources to address these risks. Currently, the focus is on the strategic risks outlined below:

- managing safety, health and environmental performance, with the aim of achieving the goal of zero harm;
- attracting and retaining the requisite skills, and ensuring that structures are
 in place to deliver on production objectives in an efficient manner, as set out
 in the Group's stated strategic plan. The company places an emphasis on
 organisational diversity, and improved employee engagement and
 participation in all business activities;
- maintaining unit production costs in the lowest quartile of the industry;
- maintaining the safe, efficient and productive use of contractors on key operations of the Group;
- maintaining effective project management processes and skills to ensure successful project implementation and delivery at operations;
- protecting and maintaining the security and reliability of physical assets;
- retaining process, systems and management technology competitiveness;
- continually reviewing, evaluating and developing growth opportunities for the Group through acquisition, organic growth and exploration;

- retaining permission to operate, on a fully compliant basis, within a dynamic legal and regulatory environment;
- managing the socio-political uncertainties that affect the Zimbabwe operation;
- addressing relevant issues regarding corporate responsibility, and being recognised as a good corporate citizen in the countries and communities in which the company operates;
- ensuring that impacts on the business in terms of utility supply disruptions are minimised; and
- ensuring that risks associated with suppliers and logistics are minimised.

5.5.1.2 BLACK ECONOMIC EMPOWERMENT

BEE, as envisaged by South African minerals legislation, is a vital policy instrument for the broadening of the equity ownership base of the South African economy, and a potential stimulus for greater economic growth and employment.

Savannah Resources Consortium (SavCon), a leading BEE entity, holds a 13.7% stake in the Aquarius Group. SavCon originally held a 29.5% stake in AQPSA's operations, which fell briefly to 26.0% following a sale to meet certain tax obligations of SavCon, before rising again to 32.5% of AQPSA as a result of the repurchase of Impala Platinum's stake in AQPSA. SavCon's 32.5% stake in Aquarius' South African operations was then transferred to the holding company. While this BEE transaction was originally undertaken at an operating company level, it was always the company's intention to deliver to SavCon a meaningful interest in the listed entity.

SavCon comprises of three individual entities:

- Savannah Resources, which is a black-owned mining and resources investment company focusing on precious and non-ferrous metals mining in South Africa. Headed by Zwelakhe Sisulu, Savannah Resources forms the core of the BEE consortium.
- Chuma Holdings, which is a BEE fund owned by women and led by Andy Kawa and HRH Princess Zenani Mandela-Dlamini. The primary beneficiaries of the fund are two trusts created to benefit HDSA's in the fields of

- education, health and social welfare. Chuma is a private company incorporated by Chuma Holdings (Pty) Limited.
- Malibongwe, which is a controlled investment of the Malibongwe Women's
 Development Organisation, a non-governmental, non-profit organisation
 focusing on the women of South Africa and, in particular, on the plight of the
 poorest of the poor.

5.5.1.3 CREATING EMPLOYMENT

In the Financial Year 2010, Aquarius employed 11 072 people (1 729 employees and 9 343 contractor employees). This is an increase of 34% on the previous year, largely as a result of the continued ramp up of operations at Everest and the integration in July 2009 of Blue Ridge into the operations.

Given the skills shortages that exist in South Africa, and the employment equity imperatives that the Company is seeking to meet, a great deal of emphasis is placed on the recruitment, development and retention of employees. Particular emphasis is placed on representation in the ranks of management by HDSA's and women in mining occupations.

At the South African operations, 51% of employees are local to any given operation that is drawn from within a 50km radius. Marikana has been particularly successful in achieving this.

Table 7: Percentage of employees at SA operations living within a 50km radius of the operation

Mine	% Local
Kroondal	52%
Marikana	61%
Everest	33%
Blue Ridge	56%
SA operations	51%

In line with the requirements of the South Africa Mining Charter, AQPSA does not discriminate against employees who are not South African. At the South African operations, about 60% of the workforce is between the ages of 30 and 60 years old and 40% are below 30 years. Despite these claims, the community of Ikemeleng protested against the lack of employment of locals by Aquarius. The 50km radius test disguises the high numbers of migrant workers living in backyard shacks in local

communities. The fact that they are now local residents in squatter camps does not infer that they are no longer migrant workers. In its 2010 report, the International Organisation on Migration found that about 60% of workers in the mining sector in South Africa are from neighbouring countries, mainly from Lesotho, Mozambique and Swaziland (International Organisation on Migration, 2010).

5.5.1.4 ACCOMMODATION AND NUTRITION

In South Africa, AQPSA and contractor employees have a number of accommodation options available to them in the form of private dwellings and rental accommodation in the private sector and hostels. Employees not making use of company provided accommodation, qualify for a monthly housing allowance which varies depending on job category, and which forms part of annual wage negotiations (Aquarius, 2010, p. 26). A monthly housing allowance is reference to the living-out allowance.

At the end of June 2010, approximately 22% of employees resided in hostel accommodation and 59% in private sector accommodation, with about 18% selecting other options. On-site hostels at Kroondal were closed in November 2009 following the dismissal of the entire workforce as a result of unprotected strike action. Hostel dwellers were temporarily relocated to Anglo Platinum's Phula single quarters, pending the outcome of the development of a revised AQPSA housing policy and strategy. The focus of AQPSA's housing strategy is:

- to provide a holistic approach to improve employee housing and living conditions;
- to promote home ownership and family accommodation; and
- to facilitate the affordability of accommodation/housing (Aquarius, 2010, p. 26).

AQPSA has made land available adjacent to the Ikemeleng Township next to its Kroondal Mine. If the land is approved by the local and provincial authorities as suitable for human settlement, AQPSA is considering various employee accommodation options on this piece of land. Investigations are currently being conducted to assess the viability of the land for employee housing needs.

Table 8: The accommodation profile of Aquarius employees on its South African operations (Aquarius, 2010, p. 26)

Type of accommodation	Uptake
Private sector rental	38%
Hostel accommodation	22%
Private dwellings	21%
Other	19%

5.5.1.5 CORPORATE SOCIAL RESPONSIBILITY AND LOCAL ECONOMIC DEVELOPMENT

In South Africa, AQPSA has dedicated community relations officers at each mine. Their role includes engaging with local communities, developing an understanding of their needs and working together with them, Local Government and different governmental departments to find solutions to the identified needs. AQPSA's corporate responsibility and LED initiatives are developed and undertaken at each operation, so that they address these specific needs and ensure that the community most directly affected by the operation reaps the benefits (Aquarius, 2010, p. 34).

AQPSA has a Social and Labour Plan (SLP) for each of its operations in which the Company has committed to specific social responsibility and LED plans and targets for a period of five years. These SLP's have been developed in conjunction with local communities, and most projects are informed by the Integrated Development Plans (IDP's) of the district and local municipalities within which each mine operates.

The overall objective of these plans is to invest in and develop targeted local economic and social ventures and infra-structure in communities that should be sustainable beyond the life of the mine. There are three broad priority areas of investment, namely:

- capital investment in education infra-structure (schools, classrooms and operational costs);
- capital investment in social infra-structure (bulk water, sanitation, town planning, formalisation of informal settlements); and
- small, medium and micro enterprise (SMME) development supplying the mines.

The fundamental driver behind all of the identified projects has been to ensure that stakeholders are given the necessary support so they can assist themselves towards sustainable development that is less dependent on the mine, particularly given the relatively short life of AQPSA's operations (Aquarius, 2010, p. 34).

All identified projects and other forms of assistance have been developed through consultative forums with the local residents and key stakeholders, using appropriate public and private development facilitators to further the concept of public-private partnerships in LED.

The key projects in the Financial Year 2010 have been:

- continued formalisation of Ikemeleng, infra-structure development and operating costs of an early childhood development centre (ECD);
- sustainable development projects, such as education infra-structure development and SMME development and mentoring of local businesses; and
- infra-structure for the Lapologang Township, adjacent to Marikana (Aquarius, 2010, p. 34).

5.5.2 The experienced personality of Aquarius as reflected by the communities of Ikemeleng and Marikana

The Bench Marks Foundation would like to acknowledge the detail of the Aquarius report, particularly with regard to the communities within which it operates. However, the interaction of the research team with the said communities made us aware of a number of concerns which we believe the company must pay attention to.

5.5.2.1 BLACK ECONOMIC EMPOWERMENT – A CRITICAL VIEW

Since the time of Cecil John Rhodes, there has been a problematic relationship between mining capital and political power in South Africa. Cecil Rhodes became Prime Minister of the Cape Colony not out of a sense of duty or service, but to advance his mining interests as he admitted in a speech in 1891: "If there is anything that induced me to take the position of Prime Minister, it was the fact that I was resolved in my mind that we should extend to the Zambezi." His dual role as business magnate and Prime Minister now gave him untold influence in Southern

African affairs (Maylam, 2005, p. 149). Robb Turrell (quoted in Maylam, 2005, p. 149) notes that "Rhodes, as a representative of the mining industry, went to the Cape Parliament to secure the conditions for the expanded reproduction of mining capital...". It could be argued that Rhodes effected 'state capture' in the process of becoming Prime Minister, and that the mining sector, forming the most important component of the economic base of the country (Bond, 2005, p. 18), has managed to control every government in South Africa since then, including the current one.

In Policy Gap 1 in 2007, the Bench Marks Foundation warned that having senior politicians/civil servants and/or their family members on the boards of mining companies or as BEE partners and shareholders, is extremely problematic and undermining of democracy. The reasons for this are simple:

- the regulatory role of government and its departments and institutions are compromised if senior figures from the ruling political party are also beneficiaries of mining; the labour, environmental, financial and social functions of the state is compromised in such a situation;
- the legislative and oversight roles of parliament are compromised if senior parliamentarians of the majority and other parties are also beneficiaries of mining;
- the role of the state as neutral arbiter in disputes between ordinary citizens and communities on the one hand and corporations on the other is compromised:
- the effectiveness of ministers and senior civil servants is compromised not only by their serving conflicting interests, but also by them doing more than one job at a time, one paid for by taxpayers and the other by private corporations - clearly the decision making by individuals finding themselves so compromised will always favour the employer which pays the highest for services which is invariably the corporation; and
- the extent to which members of the judiciary are also on the take from the
 mining sector in particular and the private sector in general should also be a
 matter of further research, as this will compromise the independence of the
 judiciary and influence decisions against workers and communities affected
 and impacted on by mining.

The current legislation requiring parliamentarians, members of the executive and senior civil servants to declare their economic interests is simply not sufficient, and is certainly completely ineffective. This situation, the Bench Marks Foundation believes, is at the heart of the cancer of corruption, which is eating away at the fabric of South African society and is one of the major stumbling blocks to effective service delivery to the poor in the country.

The Bench Marks Foundation fully supports broad based BEE, but the current BEE model completely defeats any real broad based empowerment, and is systematically eroding the institutions of democracy in the country.

With the above remarks in mind, the Bench Marks Foundation is disappointed by the BEE information contained in the Aquarius report to the effect that Zwelake Sisulu, HRH Princess Zenani Mandela-Dlamini, and Malibongwe Women's Development Agency are all beneficiaries of Aquarius shareholding. Mr Sisulu is closely associated with one of the leading families of the ruling African National Congress (ANC) party. Zenani Mandela-Dlamini is a daughter of Nelson Mandela, while the Malibongwe Women's Development Agency is a project of the ANC Women's League. It is very difficult not to conclude that the objectives of this empowerment project are political patronage.

The assessment of possible political patronage is further supported when a comparison is made of the operational managements at the group's operations at Karee in Marikana and that of Mimosa in Zimbabwe. At Karee, only two out of eleven operational managers are black, while at Mimosa all operational managers are black (Aquarius, 2010, pp. 54-55).

5.5.2.2 CREATING EMPLOYMENT

COSATU and NUM have been vocal against sub-contractors, outsourcing and labour brokers, calling on the government to ban labour brokers outright and on mines to phase out sub-contractors (also referred to as contractors) (COSATU, 2009, pp. 12 - 15). It is therefore surprising to note the heavy dependence of Aquarius on contractors; of its total labour force of 11 072 people,

only 1 729 are direct permanent full-time employees, while 9 343 are contracted employees.

COSATU and the NUM consider outsourcing and the use of contractors as a union-bashing strategy, as the degradation of work and wages, and as a means of externalising costs that are associated with fulltime employment. The extraordinarily heavy reliance of Aquarius on contractors raises more questions than answers. It also makes a mockery of the claims by Aquarius that it almost exclusively employs local labour (within a 50km radius of its operations). This emerged finally as a sham when locals in Ikemeleng went on the rampage during a protest against the lack of employment for locals in surrounding mines, including the operations of Aquarius, on 22 October 2011.

The SABC reported that Aquarius Platinum mine management has agreed to employ local residents (SABC, 2011). Contractor labour usually resides in informal settlements and we suspect that this is where most of the contract labour of Aquarius resides, given the proximity of this settlement to the operations of the company, or in contractor hostels. A major risk to all the corporations under review would be periodic outbreaks of xenophobia. It is the considered opinion of the Bench Marks Foundation that the housing and employment policies of the corporations under review have xenophobia as an unintended consequence.





Photo 20: Ikemeleng typical housing for subcontractor workers



It is in the context of Ikemeleng that Mamdani's 'native' versus 'settler' distinction becomes most apparent. Local communities in Chaneng, Marikana and Ikemeleng are increasingly demanding employment preference in mines surrounding their communities, and they do not consider migrants imported from elsewhere and renting shacks as local.

Xenophobic Wars: Remarks by Ikemeleng Resident

As mining is depending heavily on migrant workers, this results in Rustenburg being one of the towns affected by the influx of people who comes from different places in search for employment. Thus emerges places like informal settlements that become the nearest places for the employees to live in. The one reason being not enough accommodation for them.

As our village of Ikemeleg is one of the places that have been affected by these migrant workers, tension between the non citizens with the citizen is very rife when coming to sharing the little resources that we have as community.

As we are living in this situation whereby we still have to queue for water for almost a day, this is where you hear of the most hatred talks amongst the Africans. Whereby people boasting of being better than others in terms of being citizens. Whereby you hear people who are entitled to vote expecting to be the first one to be served.

People who are doing business in Ikemeleng are not good in the way they relate with others because they claim that they pay tax while others don't pay, seeing it unfair because they stand to lose while others benefit unfairly.

We are high lighting this issue while it is still time for we expect serious measures to be taken to redeem this plague of hatred amongst the Africans. Because all this fuels tribalism and gangsterism.

We feel again that ignoring this will be a serious blunder, for we feel that delaying in implementing what was in the national anthem called services delivery will also contribute to that dilemma. As we will hear people who did not qualify to vote accusing the voters by voting for nothing as they suffer the same conditions. This is the situation we are living in Ikemeleng.

5.5.2.3 ACCOMMODATION AND NUTRITION

Aquarius has 38% of its employees on South African operations living in private accommodation. It must be remembered that only 1 729 of its 11 072 employees are permanent, non contracted employees. Employees on the living-out allowance and working for sub-contractors throughout the Bojanala District live in appalling conditions, either in backyard shacks or in shacks in informal settlements (squatter camps).

5.5.2.4 CORPORATE SOCIAL RESPONSIBILITY AND LOCAL ECONOMIC DEVELOPMENT

We have already noted the problems associated with the employment of a largely contract labour force. The focus of Aquarius on Ikemeleng in terms of CSR expenditure and its attempts to assist with the formalisation of Ikemeleng are probably in recognition of the fact that many of its employees reside there. However, the formalisation process is creating tensions in a very diverse community. Residents who have migrated into the community fear that the Rustenburg council will give RDP houses to be constructed only to locals.

5.6 Royal Bafokeng Platinum Limited (RBPL)

5.6.1 Private and public personalities

RBPL (Previously Royal Bafokeng Rasimone Platinum Mines – RBRPM) is 57% owned by Royal Bafokeng Holdings (RBH) and 40% owned by foreign shareholders. RBH claims to be "...a community-based investment company, responsible for the management and development of the commercial assets of the Royal Bafokeng Nation (RBN), with the overall business objective of optimising returns to enable the RBN to deliver sustainable benefits to the community" (Royal Bafokeng Holdings, 2010, p. 3). It is important to note that RBH claims to be a 'community-based investment company' not a 'community owned investment company', and it is in this distinction that the myth of the wealthiest tribe in Africa is constructed.

The Royal Bafokeng Development Trust is in turn the sole shareholder of RBH "...and the former's overarching developmental mission – Vision 2020 – is financed mainly through dividends and interest income generated by RBH. This vision seeks to create opportunities for the Bafokeng people to become participants in the

regional and national economy of South Africa by the end of 2020, thus ensuring a community that is competitive, thriving and self-sufficient. In striving to bring Vision 2020 to fruition, RBH has adopted a long term investment view and has sought to diversify its investment portfolio in an attempt to lessen the reliance on platinum as a source of wealth. To this end, RBH's commercial investment portfolio currently comprises interests in the telecommunications, services infrastructure, financial and manufacturing sectors, in addition to the company's significant holdings in the mining industry" (Royal Bafokeng Holdings, 2010, p. 4).

Royal Bafokeng in its own words:

Royal Bafokeng Platinum (RBPlat), a black-owned and -controlled mid-tier platinum group metals (PGMs) producer, originates from a joint venture – Bafokeng Rasimone Platinum Mine Joint Venture (BRPM JV) – between Anglo Platinum and Royal Bafokeng Holdings (RBH), a community-based investment company owned by the Royal Bafokeng Nation (RBN).

Following a restructuring of the BRPM JV in December 2009, RBPlat obtained a 67% majority interest as well as operational control from 4 January 2010, and translated this interest into a public vehicle through its listing on the JSE Limited (JSE: RBP) on 8 November 2010.

The joint venture was formed to exploit PGMs in the Merensky and UG2 Reefs on the Boschkoppie, Styldrift and Frischgewaagd farms in the Rustenburg area which have been identified as hosting the last undeveloped Merensky Reef on the western limb of the Bushveld Complex. The BRPM JV produces approximately 270,000 PGM ounces per annum and has a total resource base of 73 million PGM ounces (4E*).

RBPlat's assets are situated on the northerly extent of the western limb, 120km from Johannesburg and 30km from Rustenburg and just 17km from Phokeng, the heart of the RBN community in the North West Province of South Africa. The Bushveld Complex hosts approximately 80% of the world's known platinum resources.

Source: www.bafokeng**platinum**.co.za/a/f/fs/rbplat_factsheet_feb11.pdf

The historical information that follows here is extracted from the RBH 2010 Annual Report. There appears to be no 2012 RBPL Annual Report. This is an unexplained anomaly.

History

1860's

To establish the Royal Bafokeng Nation's patrimony it purchases the land (1 200 km²) that the nation had occupied historically.

1925

Platinum is discovered in the Bushveld Complex (BIC) of which the land owned by the RBN is part. The BIC is the world's largest PGM deposit.

• 1990's

Discussions take place between RBN and Anglo Platinum to form a joint venture.

1997

Site of future BRPM (then known as Rasimone Mine) established.

In terms of its private and public personality, the following critical points will be put under the magnifying lens.

5.6.1.1 OWNERSHIP

RBPlat is a newly established company created from the restructuring of the BRPM joint venture between RBH and Anglo Platinum Limited. The restructuring has resulted in the ownership and control of the mining operations of the joint venture vesting in the RBH. RBPlat is a black-owned and controlled, mid-tier PGM's producer (Royal Bafokeng Holdings, 2010, p. 36).

RBPlat listed in November 2010, and produced a sustainability report which is in accordance with GRI and which achieved a B+ Application Level. The company intends to participate in the Carbon Disclosure Project in the future. Accountability for sustainability issues rests with the Board, while senior management is responsible for addressing these concerns. The company is also compliant with King III (Royal Bafokeng Holdings, 2010, p. 36).

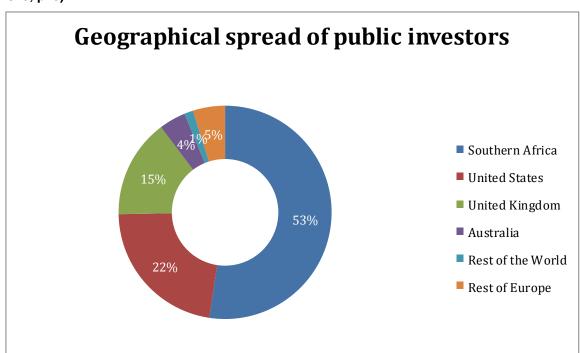


Figure 9: Geographical spread of public investors in BRPL in 2010 (Bafokeng Platinum, 2010, p. 3)

"They tell us that the mine belongs to us. But we have never even set eyes on a share certificate. Our community has never seen revenue from this mine, nor have we been consulted on how to spend that money from the mine. We have never been part of the budget process of either the mine or of the Royal Bafokeng Nation". (Gomolemo, Luka resident).

5.6.1.2 RISK MANAGEMENT

BRPM has been ISO 14001-certified since 2002 and measures to mitigate and manage the company's major environmental risks have been implemented. These risks include:

- clean and dirty water separation;
- releases to soil hydrocarbon spillages;
- releases to air dust;
- surface- and groundwater contamination high nitrate levels; and
- waste management generation and disposal.

To deal with these issues, action plans have been developed to manage clean and dirty water separation, and systems are either being put in place or their efficacy tested for the prevention and management of all other environmental concerns.

Within the next two to five years, RBPlat aims to develop an environmental strategy, implement a waste recycling programme and improve the company's water treatment facilities. There were no significant environmental incidents during the year under review (Royal Bafokeng Holdings, 2010, p. 36). There were, however, three fatalities at BRPM during 2010.

5.6.1.3 STAKEHOLDER INTERACTION

A stakeholder engagement framework has been developed and this, in conjunction with a communications strategy, is currently being rolled out. RBPlat is working on addressing the complaints that have been received from the surrounding communities, which include the perceived lack of employment opportunities and the lack of opportunities for local SMME's. RBPlat spent a total of R13 million on CSI during the company's financial year (July 2009 to June 2010); though the majority of this was spent during 2009, as 2010 was a year of consolidation for the company, especially in respect of social delivery. Currently, RBPlat's primary CSI focus areas include poverty alleviation and job creation, education, health and basic infrastructure (Royal Bafokeng Holdings, 2010, p. 36).

"All the developments take place in Phokeng where the king stays, we don't see any development here in Chaneng. We want a building for our traditional council". (Mchizo, Chaneng resident).

5.6.1.4 HIV/AIDS

RBPlat is particularly involved in HIV/AIDS awareness generation and education, and has an HIV/AIDS co-ordinator on the mine responsible for both the HIV/AIDS programme and the wellness programme. During 2010, 285 employees were trained as peer educators and regular campaigns are undertaken to inform employees on HIV/AIDS prevention and treatment. In the community, RBPlat is involved in feeding schemes which assist HIV-positive community members as well as orphans and vulnerable children. RBPlat is committed to the principles of the Broad-based Socioeconomic Empowerment Charter (the Mining Charter) for the South African mining industry and the Mining Charter Scorecard, established to monitor performance against the Mining Charter (Royal Bafokeng Holdings, 2010, p. 36).

5.6.2 The experienced personality of the Bafokeng Platinum Mines (Chaneng and Luka Communities)

The views of the relevant two communities in the area, Chaneng and Luka, - through their perceptions - sketched a different picture of the Bafokeng.

5.6.2.1 THE CONTESTED HISTORY OF LANDOWNERSHIP

Many communities contest the RBN version of history, particularly the part that reads "...to establish the Royal Bafokeng Nation's patrimony it purchases the land (1 200 km²) that the nation had occupied historically". The people of Luka and Chaneng claim that the purchase of land was not made by a single entity called the RBN, but was separate purchases made by separate communities; the descendants of those who purchased the farms have formed the Bafokeng Land Buyers Association.

Table 9: Record of farms bought by communities in the late 19th and early 20th century in the area now broadly known as Phokeng (Breutz, 1987)

Name of Farm	Old Deeds	New	Size in	Purchaser		
	Office	Number	Hectares			
	number					
Beerfontein	432	263 JQ	1354	10ha - Herm Luth. Mission		
Beerkraal	439	120 JQ	4436	lands		
Beestekraal	286	290JQ	3984	Formerly trust lands and		
Boschfontein	489	268JQ	1921	village port lands		
Boschkoppie	685	104JQ	1928			
Boschpoort	57	284JQ	295			
Diepkuil	383	116JQ	664			
Doornspruit	646	84JQ	2274			
Doornspruit	878	106JQ	2555			
Doornspruit	Annex	109JQ	300			
	054					
Elandsheuwel	285	282JQ	1456	Lands and village lands, smal		
Goedgedacht	200	267JQ	667	portion SA Railways		
Goedgedacht	368	110JQ	2102			
Goedgedacht	409	114JQ	2486	Bought by chief		
Haakbosch	340	79JQ	1926	Grazing, chief's family		
Hartebeestspruit	643	88JQ	3413	Grazing		
Hoedspruit	224	298JQ	692	Port E,D; lands, grazing		
Honingfontein	571	122JQ	1197	Grazing registered in the		
				name of Tumagole		
Kleindoornspruit	255	108JQ	2501	Bought in the name of a chief		
Klipfontein	538	300JQ	1966	Lands, village		

Name of Farm	Old Deeds Office number	New Number	Size in Hectares	Purchaser
Klipgat	834	281JQ	1912	Grazing bought by 8 Dikgosana
Kookfontein	337	265JQ	2081	Lands and grazing
Morgenzon	427	261JQ	975	Grazing
Nooitgedacht	908	287	408	Northern portion A
Do.			1097	Northern portion C (S half baPhalane)
Reinkoyalskraal	333	278JQ	3196	Lands, Village
Rhenosterfontein	887	86JQ	512	Portion. South of Elandsfontein
Rietspruit	419	83JQ	2733	Formerly trust
Roodekraalspruit	592	113JQ	95	Portion C private lands
Rooyewal	751	285JQ	1680	Portion
Styldrift	583	90JQ	4513	Lands bought by chief and five others (baChana)
Toulon	1053	111JQ	196	
Turfontein	279	302JQ	2869	
Turfontein	379	262JQ	1395	Lands and village
Tweedepoort	189	283JQ	3331	Lands and village bought by 3
				Dikgosana
Uitvalgrond	912	257JQ	350	
Uitvalgrond	334	105JQ	877	Private bought by group
Vaalkop	677	275JQ	2227	Lands
Vlakfontein	430	276JQ	3525	Lands
Welbekend	430	117JQ	2316	
Wildebeestfontein	497	274JQ	1997	Formerly trust
Zanddrift	886	124JQ	2447	Grazing bought by Chief
Zwartbank	494	121JQ	2391	Formerly Trust

Bernard Mbenga notes the following during the time of the Transvaal Republic and later the Union of South Africa: "Due to the legal inability of black people to buy land in their own name, they turned to the missionaries who worked among them for assistance... the Bafokeng at Phokeng near Rustenburg... were assisted by the Rev. Penzhorn" (Mbenga, 1996, p. 207). What is clear from the table above is that not all land which is considered under the control of the Bafokeng nation today was bought simultaneously, or that it was bought as part of a common collective decision with the greater aim of uniting the Bafokeng people on a single territory.

Some land was bought by individuals, others by clans or family groups, others by sub-tribes. Those who bought the land did so to sustain their agricultural way of life. In distorting the history of land acquisition, the authors of the RBH, RBN and RBP reports seek to deny individual, family or clan claim on the land by seeking to create the false impression that land was acquired collectively. It is to emphasise collective traditional rights over individual civil rights in the worst tradition of British indirect rule, only this time it is mining corporations who are promoting it and benefiting from it.

5.6.2.2 A GRAVE MATTER – THE RBN, RBH, RBP AS CUSTODIANS OF TRADITIONAL CULTURE IN PHOKENG

The Royal Bafokeng Authority claims to uphold and promote the cultural and heritage interests of the Bafokeng people as a whole. Its commercial investment in mining and other ventures are held up as a means of generating the resources through which the social, cultural, heritage and economic interests of the Bafokeng people can be sustained and promoted.

However, given these claims, the Bench Marks Foundation's research team was surprised and dismayed to be taken to prospecting beacon / marker 212 for the new contested Styldrift mine. There, in the middle of the veld, the team found a desecrated burial site. A prospecting team prospected right on top of the site. According to informants, the Tswana workers on the prospecting team warned their supervisors that this was a burial site. The supervisors ignored these warnings. The desecration of graves is an offence in terms of South African Heritage legislation, and any EIA done by Styldrift managers (Styldrift mine is being developed by Royal Bafokeng Platinum) should have identified, marked out and protected these graves.

The desecration of these graves, the contest over land, the lack of benefits derived from mining in close proximity to their village, and a lack of employment opportunities for local youth has brought the Bachanang people of Chaneng into conflict with the Royal Bafokeng Authority, RBPlat and the management of Styldrift mine. In a meeting mediated by the provincial government and attended by a joint task team of the Chaneng Kgotla (headman's council), the RBA, RBH and RBP, one of the young people from Chaneng, Masilo made the following impassioned plea: "This is our land, this is our heritage, that platinum under the soil is our wealth. We will fight for it. We might be poor but we know what is ours and we will defend it".

The Bafokeng Land Buyers Association in its own words: 29 March 2011

A brief on the 'Public Policy Dialogue on Mining, Communities, and Workers' Conference funded by the Foundation for Human Rights

The Bafokeng Land Buyers Association (BLBA) made a presentation on the struggles waged by communities forming the Bafokeng 'tribe' at the conference funded by the Foundation for Human Rights, held in Johannesburg on the 01-02 February 2011. - *reflects Thusi Rapoo*.

The Conference was attended by community-based organisations from around the country engaged in vicious battles against mining companies operating in their areas. Academic papers were presented by experts on acid mine drainage that destroys ecosystems and water quality particularly in areas around gold mining towns; the cluttered State heritage resource management regime which condones the bombing and excavation of graves by the mining companies; and the State's land restitution and reform process which has failed to redress the land question. The presenters painted a picture of State engineered maladministration, meant to confuse and deprive desperate poor rural communities of access to Government support around issues related to their land. Conflicting and overlapping Government mandates create a state of confusion which the mines can exploit and use to their advantage. For instance, when Anglo Platinum blew the graves of Sekuruwe community in Limpopo their defence was that once they have complied with mining laws overseen by the Department of Minerals and Energy (DME), they need not account to the National Heritage Resource Council who have jurisdiction on the protection of graves. The uninformed poor rural communities would be left to guess as to which Government department to approach for intervention.

Local Municipalities, who bear the brunt of bad mining practices, cannot hold the mines to account as they are often told that mining is a National competency, meaning therefore that the mines are only answerable to the national DME, and not the Municipalities.

In 1992, the World Bank released a policy framework to guide the new South African government on land and minerals. It has become clear that all the administrative confusion created around issues related to land ownership and control is deliberate, promoted and supported to empower multinational companies in their exploitation of resources (minerals and environment) and is done to the detriment and disempowerment of the affected land owners. At worst, such control of strategic resources (land and minerals) by a few elite at National level can be used by the West, through their agents (the World Bank, IMF and their imperialist multinational mining and agricultural companies) to ferment ethnic clashes within the ruling party and amongst communities.

Source: http://bafokeng-communities.blogspot.com/2011_03_01_archive.html

Photo 21: Prospecting marker: SD212 Styldrift mine with remaining grave of community burial site in the background



The RBH representatives did not bother to show up for the meeting leading to the members from the Chaneng Kgotla, demanding that the meeting discontinue and that the provincial government write a strong letter of reprimand to RBN and RBH for disrespecting the Chaneng community.

"After we protested, that is when they started listening to us. They wanted to meet with us. For the first meeting they wanted us to meet at Sun City. We said, 'no we cannot meet you there. The community will think that you are buying us out, that you are corrupting us.' We told them that 'the only place you can meet with us is in the village in the community, where everyone can see that we are meeting." We also thought let them come to us and see how we live, how underdeveloped our village is despite their mines having been here for a very long time." (Chaneng Youth Leader).

5.6.2.3 OWNERSHIP AS SEEN FROM THE COMMUNITY

Not only are the people of Chaneng contesting the land question, but they are also demanding a 30% ownership state in the Styldrift mine as compensation for having given up their land for its development. Communities are increasingly rejecting the usual offers of 1% or 2% share ownership, which they have to purchase at great financial cost. Communities are also rejecting the usual compensation models

employed by mining corporations in evaluating community land and assets prior to compensation. Communities demand that:

- their land be valued inclusive of the value mineral reserves below the land;
- the compensation includes a percentage of the total value of the mineral reserves below the land; and
- they are compensated for the loss of economic independence and self reliance, because mining disrupts the pre-mining economy completely and turns independent communities into communities entirely dependent on mining.

Communities are also beginning to demand broad based ownership which allows them to decide how to utilise resources generated from such ownership, rather than having things done for them. Thus, the Chaneng Kgotla and the numerous other villages are demanding up to 30% shares in local mines. When the Bench Marks Foundation research team asked if the Kgotla in Chaneng had ever seen share certificates indicating that they own shares in RBH or RBP, the answer was an emphatic 'no'. When asked if they ever received dividends directly as a community, the answer was again in the negative. Asked if the Chaneng community tribal council received any money annually for their effective functioning, the answer was: "…never, we are not even consulted about projects they claim to be doing 'for' us".

5.6.2.4 HIV/AIDS AND HEALTH

Members of the Chaneng community claim that the local community clinic is not coping with demand for health services. They also complain that the backyard dwellers and informal settlers who are on the living-out allowance swell the number of patients using the local clinic causing shortages in essential medicines such as ARV's. They are also complaining that mining companies are referring workers to the local clinic instead of treating them at mine health facilities. A mine worker, when asked by a member of the community about his presence at the local clinic replied: "I'm working as a contract worker at the Rasimone mines, so I'm not privileged on some medication in the mine clinic. For example, I was sick and in need of an X-Ray, but they transferred me to Chaneng clinic".

Other mine workers frequent the village clinics out of fear that should their health conditions, especially lung functions are discovered, they will be boarded and retrenched.

5.6.2.5 LOCAL EMPLOYMENT

The Chaneng youth are also concerned about the double standards that the mines apply in terms of labour recruitment. They complain that they are unable to secure jobs at the surrounding Impala and Bafokeng mines, because they are invariably told that they do not have experience or maths and science.

The youth became particularly incensed when Shaft Sinkers, who are developing Styldrift Mine on behalf Bafokeng Platinum, allegedly appointed a lamp-clerk all the way from Welkom in the Free State. Lamp clerks manage the hat lamps that are issued to workers before every shift and collect the lamps when workers come off shifts. The youth wanted to know if a lamp clerk required experience, matric or maths and science. The youth questioned the policy of importing labour in preference to building a local skills base. Most mining operations prefer to import labour because they wish to get into production as quickly as possible and consider skilling/training as a costly delay to the production process. However, importing labour has a number of social costs to surrounding communities:

- communities have to house the mostly single men who are imported either in back yard shacks or in informal settlements;
- the imported men look to gratify themselves sexually with local women, this
 contributes to the spread of HIV/AIDS and sexually transmitted infections
 (STI's), and increasing levels of violence;
- the imported labour does not necessarily recognise the local traditional authorities, and therefore undermine social cohesion; and
- the imported labour does not only deprive locals of job opportunities, but also
 puts a strain on state services such as health and welfare. This leads to local
 resentment and can contribute to outbreaks of xenophobic attacks.

5.6.2.6 SPECIFIC ISSUES FROM LUKA VILLAGE

Luka village also falls under the control of the Royal Bafokeng Authority and they are also contesting the control of what they consider to be their land by the RBA and have an ongoing court case regarding the matter. The Luka monitors did their own small perception interviews with families resident in the village. The tables below represent their findings.

Table 10: Number of families interviewed per section of the village

Section	Number of families interviewed
Makgotlhe	6
Magakgane	8
Ramakatswana	6
Photsaneng	23
Tlebebe	4
Ratswhene	2
Total	56

Employment profiles of interviewed families

The table below shows the employment profile of the families interviewed:

Table 11: Employment profile of families interviewed by Luka monitors

	Male	Female	Total
Total number of people by gender	161	145	306
Total number of working people	72 (44.7%)	37 (25.5%)	109 (35.6%)
Total number of people working in a	45 (27.9%)	12 (8.27%)	57 (18.62%)
mine related activity			
Total number of people of working age	28 (17.39%)	30 (20.68%)	58 (18.95%)
who are unemployed			
Total number in school or	38 (23.60%)	28 (19.31%)	66 (21.57%)
college/university			
Total number who are below school	18 (11.18%)	21 (14.48%)	39 (12.74%)
going age			
Total number who are too old to work/on	9 (5.59%)	20 (13.79%)	29 (9.44%)
pension or disabled etc.			

The table above shows very high levels of unemployment in Luka Village, despite the presence of a large number of shafts owned by both Bafokeng Platinum and Impala Platinum. This also implies that there are few goods and services procured by these mining companies from local communities, and that there is hardly any small and medium enterprise development taking place in these villages.

Family monthly income for Luka Village

Table 12: Total monthly family income for interviewed families

R0 to R1000	R1001 to R1500	R1501 to R2000	R2001 to R2500	R2501 to R3000	R3001 to R4000	R4001 to R5000	R5001 and Above	Did not Respond	TOTAL
8	2	3	5	6	9	4	12	7	56
14.28%	3.57%	5.35%	8.92%	10.71%	16.07%	7.14%	21.43%	12.5%	97.97
66.4% earn less than R5000 per month									

The table shows that 66.4% of families interviewed earn less than R5 000 per month (roughly US\$ 625), while 27.2% of those interviewed live below the portion of people whose income is less than US\$ 10 a day. This village, like the others reviewed in this study, exists in the shadows of some of the richest platinum mines on the planet.

Health and respiratory problems in the Luka Community

The Luka monitors asked families interviewed: "Does anybody in your family suffer from any one of the following health problems: tight chest, coughing, wheezing, difficulty with breathing, irritation of the eyes, asthma?"

Table 13: Respiratory health issues in the Luka Community

	Suffering	Receiving Treatment	Admitted to Hospital	Resulting in Death
Adult	56	37	12	12
School Aged Child	16	8		
Baby	6	3	2	
Total suffering	78 (25.49%)	48 (15.68%)	14 (4.57%)	12 (3.92%)
Total interviewed				306

Earlier in the report, the symptoms of platinosis were discussed. We also noted the self admitted exceedances of SO₂ and CO₂ into the atmosphere by the processing operations of the reviewed mining corporations, all also admit to contributing to dust particles in the atmosphere. Community members complain of respiratory problems and these problems are linked to the mining operations in the area. However, because of the numerous processing and smelting operations in the district, it is difficult to attribute the source of origin to a single processing or smelting operation. The Bench Marks Foundation believes that the mining companies should be held collectively responsible for respiratory problems in the communities affected.

Other problems experienced by Luka Community as identified by the monitor survey of Luka families

The Luka community monitors then asked families if they or their family experienced any problems resulting from mining activity. The table below tabulates the key responses:

Table 14: Problems attributed to mining by families interviewed by Luka monitors

Community Problems			Luka Section (See Below)					% out of 56
	Total	1	2	3	4	5	6	
1. Cracked houses	38	6	5	6	17		4	67.85%
2. Open cast blasting	22	3	2	2	10	1	4	39.28%
3. Air Pollution	21			3	13	2	3	37.5%
4. Health	16			4	8	3	1	28.57%
5. Crime	13			6	2	2	3	23.2 %
6. Migrants	10	1		8			1	17.85%
7. Water	10				5	3	2	17.85%
8. Overcrowding	8				4	2	2	14.28%
9. Noise	8			6	2			14.28%
10. Transport	6	1	1	3		1		10.71%

Section	No. of Interviews
Makgotlhe	6
Magakgane	8
Ramakatswana	6
Photsaneng	23
Tlebebe	4
Ratswhene	2
Total	56

This shows that the community does not consider the mines around them as good neighbours, good citizens or good personalities. The issue of cracked housing is a perennial problem, as is the standard response from mining companies to the effect that "...we employed independent experts to assess the cracks and they found that the cracks are not caused by mining, but by poor building and construction of the houses". The Bench Marks Foundation would like to make the following comments in this regard:

 village houses throughout the North West Province are constructed along much the same designs and patterns everywhere, yet the cracking of houses occur mostly in villages in close proximity to mining operations;

- most of the fatal accidents particularly at Impala mines in close proximity to Luka and Chaneng are related to falls of ground; this indicates heightened levels of seismic activity, i.e. tremors in the area. Such tremors are caused by the impact of mines on faults; and
- according to Impala, most of the mines near Chaneng and Luka are between 500 meters and 1 000 meters deep; this implies that the mines are sufficiently shallow for them to cause surface tremors during blasting. This situation is similar in Marikana where Lonmin operates its Karee shafts and where houses also suffer from extensive cracking.

Considering that these are relatively low income families who use large portions of their savings to construct and maintain their houses, the Bench Marks Foundation finds the dismissive attitudes of mining companies to the issue of cracked housing very problematic and a denial of social responsibility.

6. CONCLUSION

6.1 Corporate personalities assessed

From the outset it must be stated that all of the corporations under review greatly improved their reporting as compared with 2007. There is a much greater honesty in the reports and it would seem as if a number of issues, such as the redeployment of workers disabled at work, reporting on platinosis in the case of Anglo Platinum, and admission of environmental exceedances, are now being reported on in much more detail. In this sense there is greater convergence between public and private personalities of the companies reviewed.

However, the way in which communities and individual members of the public living in close proximity to the operations of the companies under review experience them as neighbours, show a complete lack of synergy between the first two personality aspects and the last one. There are a number of reasons for this:

- CSR programmes are top-down, designed by experts and imposed on communities; there is very little evidence that communities are actually consulted about their needs, or about their frustrations concerning the impact of mining operations on their lives.
- Mining companies are obsessed with cutting costs and of reporting low cost operations to shareholders. The Bench Marks Foundation is not convinced that low cost operations are sustainable, safe, and healthy for workers or communities, or in the long term interests of the shareholders. Cost cutting is usually at the expense of the environment, labour and communities. Cost cutting on safety leads to high fatalities and to the Department of Mineral Resources halting operations every time there is an accident. Cost cutting leads to worker strikes to protest low wages and to protest unsafe working conditions. Cost cutting leads to the externalisation of costs to society, thus the living-out allowance must represent a huge saving on the costs of running hostels; however, the living-out allowance has shifted the costs of housing, feeding, entertaining and reproducing workers to often very low resourced communities who themselves benefit very little from the mines.
- Mining companies are chasing numerical targets set by the Mining Charter,
 such as for the representation of HDSA and women. Although these targets

are far too low, they are often the ceiling beyond which companies seem incapable of going. What is even more concerning, is the fact that little thought is given to the unintended social/cultural, economic, health, safety and environmental consequences of chasing numerical targets, without transforming the workplace culture or considering the anthropological, sociological and psychological impact of decisions. The chasing of the gender target is a case in point. The issue of demographical representativity is another highly problematic question. Mines cannot be satisfied with achieving a 40% target for black South Africans in skilled and management positions as required by the Mining Charter. Surely the aim should be to reflect the demographic reality of South Africa. If companies in Zimbabwe and Botswana can run successful operations with almost entirely black management and labour forces, there is no reason that the same cannot be achieved in South Africa. Mining companies are quick to lament the poor state of education in South Africa. However, they are slow to answer the question of why there is no mining college or technical school in Rustenburg sponsored by the mines with the aim of skilling local communities. This is despite the fact that platinum mining in Bojanala District started as long ago as 1931 in the case of Rustenburg Platinum, and in 1968 in the case of Impala Platinum.

- The shocking disregard for community safety as demonstrated by the many unguarded rail and road crossings in Luka, Chaneng, Rustenburg Town and Marikana, where most operations are in excess of 40 years old, demonstrates the attitude of mining companies in Bojanala not only to community concerns, but also to the whole notion of CSR.
- The tendency to sell off cost externalisations as CSR is yet another worrying issue. The Bench Marks Foundation is concerned that housing policies which try to sell bank driven housing programmes, in which employees pay for their houses, while pretending that it is a cost to the corporation, is dishonest to say the least. The interests on bonds means that the employee ends up paying far more for the housing than what it costs to build, and while the mining corporation recovers all its losses incurred in the construction of the houses, the banks get rich from the monthly deductions from workers' wages. We are not surprised that the uptake is low, or that most workers

prefer the option of the living-out allowance, even if that means a shack in a squatter camp. We also noted that this type of policy is a form of labour control.

- Another very problematic development is the issuing of shares to communities and workers (see section 5.1.2.4 Multi-million Rand BEE Deal for Communities). The problem here is that communities do not receive these shares for free, but have to pay for them, this despite the fact that the current MPRDA environment virtually allows for corporate land grabs from communities at levels of compensation that are extremely low. The Bench Marks Foundation takes the position that communities should be compensated for any land lost to mining operations, on a calculation that would give communities a percentage of the value of the mineral reserves under their land.
- The Bench Marks Foundation is also concerned by community reports to the effect that corporations are finding creative means of shifting their health responsibilities to their employees, unto the village and public health infrastructure. We increasingly find a state serving corporate interests instead of public interests in health, education and social services.
- The Bench Marks Foundation is concerned about the continuing practice of attempted state capture by mining corporations, and we are disappointed that despite our warnings in 2007, we find companies courting political influence through the deployment of prominent politicians to boards and to senior management.
- The Bafokeng Model should be questioned (see discussion under section 5.1.2.4 Multi-million Rand BEE Deal for Communities). The Bench Marks Foundation considers this model a form of community capture rather than a model of community participation. There is no doubt that the model has generated immense wealth, but despite this, it has achieved very little welfare and negligent human development. What we see in the area under the control of the RBN is an emphasis on customary rights constructed along the lines of the old British model of indirect rule, which gives prominence to the despotic in traditional society, while undermining the democratic aspects of that society. It is a system that has served mining capital well for more than a century of colonialism and Apartheid, but it should not as a system be

encouraged in a democratic post-Apartheid society, particularly in that it deprives the individual of civil rights while making him or her vanish into the collective community assumed by customary rights. Mahmood Mamdani correctly identifies this as a primary cause of state failure in post colonial Africa.

- We note with trepidation that some of the Impala shafts are nearing the end of their lifespan, and hope that these shafts will not be sold off as BEE projects (see section 5.2.1.1 Sustainability). The Bench Marks Foundation rejects the practice of mining corporations that sell off their environmental mess and closure responsibilities to unsuspecting 'Juniors' mining companies. The Bench Marks Foundation notes that the mess with water in Johannesburg derives exactly from corporations abandoning or selling off mines just before closure. We call on government to legislate against this nefarious practice.
- The research team notes with concern the health and welfare status of communities living in close proximity to mines in the Bojanala District. The impact of the import of labour rather than the skilling of locals not only deprives locals of economic and employment opportunities, but also impacts on their health and welfare. There is a direct link, in our opinion, between HIV/AIDS and the living-out allowance (of great concern here is the appearance of sexual slavery, or the commodification of the female body we noted examples of women being brought in from Mozambique for the purpose of sex slavery, and the renting of daughters to mine workers). We are also concerned about dust and smoke emissions and respiratory problems experienced by communities.
- By excluding communities from real participation and shared ownership in the mines, the mining companies are excluding themselves from communities. By creating for themselves identities loyal to foreign ownership and shareholding to the extent of even delisting from the JSE and relisting in London, mining corporations are assuming a foreign identity and a foreign personality lacking in patriotism. In doing so, operations assume the form of laagers, and management at operational level adopt a laager mentality which can only end in conflict with local communities. The seething anger in

communities about their experience of corporations is demonstrated in the block below derived from the community report:

MINE PROMISES AND CORPORATE SOCIAL RESPONSIBILITY IS A LIE

The reports from the different communities show that CSR is a lie. Mines make a lot of promises when they enter and when they make social labour plans. In their reports they talk about how much they are doing for the community as part of their CSR. As a community we experience arrogant mine officials, who use their resources to avoid community organisations and only deal with individuals whom they can control. When they set up community projects they do not consult with the community but only selected individual. We see many projects which have failed or which simply serves a few individuals.

Mining companies initiate most of these projects which are mainly intended to impress their shareholders and go into their glossy annual reports to satisfy their public image. Rarely do the projects develop the lives of the communities as they are determined by the corporate world and not by the communities.

(Source: Rustenburg Community Monitors, 2012)

HOW TO BALANCE CORPORATE PERSONALITIES:

The design of CSR programmes:

Clearly any mining operation operating in a particular geographic space would design its CSR programme around the following:

- Mitigating its own impact on its immediate operational boundary as well as
 its wider social, economic and environmental footprint; and, where such
 impact is unavoidable allowing the surrounding population to meaningfully
 participate in committees created to mitigate such impact, including disaster
 management committees, health and safety committees, environmental
 management committees, mine closure committees and recruitment
 committees.
- Not externalising any social, environmental or economic costs of its operations to the surrounding population or structures of governance and authority.
- Contributing meaningfully to the development of social, economic and environmental development and sustainability of the region, district or local geographical area, including the development of infrastructure, health and education facilities accessible to all.
- Seek prior and informed consent for developments at every stage of the life of mine and accepting the right of communities to refuse.
- Meaningfully compensate communities and individuals for any damage or loss they may suffer as a result of the mining activity.
- Accept responsibility and liability for any unintended consequences of mine development or corporate policies.

7. RECOMMENDATIONS

7.1 Background

These recommendations are based on our study undertaken in the Bojanala District, and are made with the sincere belief that the basic human rights failings and violations identified will be addressed as a matter of urgency. The recommendations are directed at the South African Parliament, the Government and other state bodies, as well as to the corporations studied in this research. We will commence with general recommendations and end with specific recommendations.

7.2 The South African Parliament

- Should resolve on a national development strategy that would lay out the possibilities for an alternative developmental path that promotes sustainability, and which does not have mining at its centre. This should be seen in light of COP17, and the environmental degradation and negative impacts on local communities resulting from mining. Another strategy is to resolve on a cost accounting approach that internalises negative mining impacts on to company balance sheets, and where mines are obliged to address such impacts in a way that involves communities in clean-up projects and local job creation.
- Should amend the various laws pertaining to the different aspects of mining, such as health and safety, environmental impacts including water and air quality etc. to invert the onus of providing evidence onto the mining companies themselves, to prove that they are conforming to the relevant laws. This would save local communities resources and time, and it would mean that the offender should provide evidence of being law-abiding, instead of those affected by the company's offences having to prove the company's transgressions.

Should amend the MPRDA to:

Include the universally agreed upon principle of Free, Prior and Informed Consent (FPIC) as a key principle guiding the work of those seeking to mine in South Africa. Given the lifespan of a mining operation we would want to add continuous free, prior and informed

- consent at all stages of the operation from green fields through to closure and completion.
- Move the responsibility for EIA's from the Department of Mineral Resources to the Department of Environmental Affairs.
- Include the option for revenue sharing for mining communities. This is to address the deepening poverty and marginalisation of many local communities, despite mining taking place in their areas. In this context we also reiterate our call to the South African government and National Treasury to urgently discuss ways of distributing equitably, on an agreed upon formula / percentage, the taxation revenues/royalties collected from mining companies to meet the needs of affected mining communities. These funds must meet the short, medium and long-term needs and aspirations of mining communities. It is widely agreed, and confirmed in this study, that mining communities have not benefited from mining, but rather have been adversely affected, which must be urgently redressed. Further, our concern is that equitable funds are put aside to ensure continuance of community life when mining ends.
- Should ensure that the current review of the Minerals and Petroleum Resources Development Amendment Bill, the draft Mineral and Petroleum Resources Royalty Bill and the Mining Charter is inclusive, and take submissions from civil society groups, including affected communities.
- Should introduce tighter conflict of interest legislation, which will bar senior politicians and civil servants and/or their family members from serving on the boards of mining companies (or as BEE partners and shareholders).
- Heed the call from communities for mining employers, government and unions to include the representation of mining communities in the Social and Labour Plans, in collaboration with the Department of Labour. The 'social license to mine' means that the DMR must value the opinion of the local communities to a greater extent, and not allow mining interests to prevail to the detriment of local communities.
- Investigate the negative impacts of employing large numbers of subcontracted labour, in particular by Implats in its South African operations.
- Close down mines with persistent high death rates among workers.

7.3 The South African Government

Must ensure that local mining communities are included and given representation in all decision-making processes that affect their lives. Furthermore, to get mining corporations to not only consult with interest groups that usually receive some kind of benefit, but also to engage with various impacted groups and genuine representative community organisations.

7.3.1 Environment

- Deploy the Green Scorpions where there is intensive mining to:
 - Investigate emissions per operations to see if they are in compliance with the law. If they are not, remedial action must be taken;
 - Penalise mining operations that do not comply with legislation, regulations or waste management standards, and make such reports public; and
 - Increase the level of fines to make their use more effective and deterring.
- Pursue corporations not adhering to legislation and regulations and prosecute them (The Department of Environmental Affairs, Department of Water Affairs, Department of Mineral Resources, NPA and SAPS). This report has shown a number of incidences where corporations knowingly and with impunity exceed CO₂ and SO₂ emissions levels, and damage the air and water quality for the surrounding communities. We have also found that the degradation of the environment impacts negatively on subsistence and commercial farmers.

7.3.2 Living conditions and housing

- Urgently investigate the appalling conditions under which communities near
 mining operations live, in particular in the informal communities that spring
 up around mines. This should be seen in light of the Millennium
 Development Goals' target 7, that includes reducing the number of slum
 areas (Target 7.D: By 2020, to have achieved a significant improvement in
 the lives of at least 100 million slum dwellers).
- Compel quality enforcement by building inspectors on the poor quality of housing in many of mining communities studied (cracked houses in the

Bojanala District), and ensuring that those responsible be brought to book (The Department of Human Settlement, SAHRC and other relevant Departments and organisations).

7.3.3 Health and safety

- The Department of Labour should inspect the health and safety situation for workers with immediate effect, in particular for occupational related illnesses.
- Undertake an investigation into the extent of platinosis amongst the population of Bojanala District in general, and those working in mines and processing plants or living in close proximity to mines and processing plants in particular.
- Appoint a special medical rapporteur to investigate occupational diseases and their impacts on the surrounding communities, as well as the shifting burden that is being placed upon the public sector (The Department of Health, SAHRC and other relevant departments and organisations).

7.3.4 Women in mining

Investigate the facilities available for women in the mining workplace, the conditions under which they work, and the relations between male and female workers in the mining workplace, i.e. ensure that female workers are properly deployed and not placed in compromising situations (The Department of Women, Children and People with Disabilities and the Department of Labour).

7.4 The South African Human Rights Commission

- Must investigate the violations of the right to land in the Rustenburg area, and look at whether mining rights for corporations have 'trumped' the land rights of the communities.
- Should look into the role of traditional leaders in negotiating the commencement and operations of mining, and the pressure exerted on them by mining companies, and make recommendations to ensure that impacted communities are engaged with, especially those that are most impacted upon, for example women.

- Investigate the impacts of mining on the right to clean water for communities located around the mines, and through such an investigation, demonstrate clearly that clean and safe drinking water is a human rights issue.
- Likewise investigate the impacts of mining on air quality and demonstrate clearly that clean air is a human rights issue.
- Boost its ROLL Back Xenophobia campaign in mining communities, and work with local communities to deal effectively with xenophobia, especially in the Rustenburg area.
- Investigate allegations that workers at Xstrata were discriminated against because they are HIV positive. In addition, we call on the SAHRC to investigate the impact of the living-out allowance on HIV/AIDS.
- Investigate the effect of unsafe rail crossings for local communities, and especially for school children, reporting the findings to the affected communities, the corporations operating in the district, and organised workers.

7.5 Civil society organisations

We call on civil society organisations and donor partners to ensure that a Strategic Fund be set up, which will support the organisational, legal and political work of poor communities adversely affected by mining. This should be an independent fund contributed to by all mining corporations on a proportional basis, depending on their size, number of operations and should be run by an independent agreed third party to assist communities in expertise, and that capacitates communities to engage over EIA's, SLP's and community development.

7.6 Corporate Social Responsibility

7.6.1 Social relations, communities and CSR

A persistent problem throughout our Policy Gap series has been the glaring neglect of fair, transparent and honest engagement by companies with communities over their needs and aspirations. The report has pointed out the asymmetries of power between the corporation and mining communities, as well as weak or incompetent regulatory framework and enforcement by various government agencies. Accordingly, the Bench Marks Foundation strongly recommends that:

- Corporations convene a meeting in public to present their annual sustainability / community report, where their license to operate will be deliberated upon by those that are affected by the operations of the corporations.
- Corporations initiate a structured forum to meet with representative community organisations (if they desire it) that should include civil society organisations, NGO's, women groups, faith based groups, and other impacted and interest groups. A clear hierarchy of stakeholders identifying impacted communities and impacted interest groups, along with trade unions should be established in developed into company policy.
- Corporations fully compensate losses incurred by communities, for environmental, and other economic losses, as early as possible.
- Corporations employ the principle of obtaining the Free, Prior and Informed
 Consent (FPIC) from communities affected by their operations.

7.6.2 Failed CSR programmes

The failure to base CSR programmes and concrete investments on what communities themselves state that they need, has led to numerous failed investments. Furthermore, there are clear gaps, such as promoting educational programmes, while at the same time not making the small investments of securing unsafe rail crossings that the children have to pass through to get to school. Since these trains are used by mining companies to transport platinum and other materials for production, it should fall under the mining company's CSR programme to secure these crossings for the local population. The Lonmin hydroponics project is another example of a CSR project where large investments were made, but where the project eventually failed. The Bench Marks Foundation recommends that:

- All mining companies carefully develop their CSR programmes in dialogue with local communities to make sure that they are directly tailored to their actual needs.
- The Chamber of Mines undertake a comprehensive evaluation of their own CSR programmes in relation to the needs of the communities surrounding the mines, and in relation to the overall needs of the country.

7.7 Recommendations for all companies surveyed in this study

First and foremost, all mining corporations should localise their sustainability reports to society and report per operation, and in local languages. Companies should also get their reports across using the media, such as radio and community newspapers. Mining corporations like Xstrata for example, give a worldwide report and such reports become meaningless as it is difficult to address their impacts and development at a local level.

7.7.1 Economic issues: local employment and sub-contracting

Noting the high levels of unemployment in general and youth unemployment in particular, mining companies operating in the Bojanala District must give preference to the training and employment of people from local communities. The Bench Marks Foundation recommends that mining companies in the district pool resources and establish a training centre / mining college in the Bojanala District.

All companies must employ mine workers permanently and end their use of subcontractors and labour brokers. The Bench Marks Foundation supports COSATU's call to ban labour brokering and sub-contracting, and call on all companies to give serious attention to this issue.

7.7.2 Employee Health and Safety

The Bench Marks Foundation calls for all mining companies to:

- Eliminate completely or reduce their reliance on contract workers significantly.
- Investigate and resolve the contradiction between safety bonuses and productivity bonuses. The strong push to increase production outputs compromises health and safety and increases fatalities during operations.
- Improve literacy training through on-going regular ABET. Time should be
 allocated for these activities during working hours. Improved literacy can
 increase worker safety, by improving workers' ability to read safety signs.
 Their stated commitment to literacy training is defeated by the over-reliance
 on sub-contracted labour which allows them to cut training costs.
- Mining companies must recognise platinosis as a verifiable disease, and take the responsibility for the health effects of platinosis, both on workers

and surrounding communities. This includes covering the health expenses of workers. The mining companies must develop a policy on health problems caused by mining, and such a policy must be worked out in collaboration with the trade unions and community representatives.

• Mining companies must employ more women workers at all levels of the companies, guided by the principle of equal pay for work of equal value. In addition, the companies must make workplaces safe for the women workers. This includes separate change room facilities, separate toilet facilities, and careful thought to the balance of the number of women and men in each work team. Annual medical examinations must afford more privacy to the employees being examined; therefore the collective examinations of mineworkers must come to an end. Furthermore, the companies must educate male workers, and institute sanctions against men who abuse women in the working operations.

7.7.3 Social issues

- Provide proper housing and accommodation for all their employees. The
 mining companies must assume responsibility for the impacts that the livingout allowance has on informal dwellings, and the resultant health and safety
 problems, as well as the spread of HIV/AIDS.
- Terminate the living-out allowance system. This should be done by entering into discussions with NUM, aiming to arrive at a mine sponsored housing system where family accommodation will be provided.
- Anglo Platinum, Impala Platinum and Lonmin/Lonplats must show concern for the safety of communities living in proximity to their mines, and put bridges and booms at all railway crossings.
- The Bench Marks Foundation notes the widespread phenomenon of cracked houses in the Bojanala District, particularly in proximity to mining operations. We are disturbed that the situation has not improved since Policy Gap 1, and that mining companies still blame house owners and occupants for the cracks in their houses. We call on the companies to take responsibility for the cracked houses caused by their mining operations.

7.7.4 Environmental issues

- Most of the companies reviewed here state in their own reports that they have exceeded emission limits for CO₂ and SO₂. The Bench Marks Foundation calls on all mining companies to take immediate measures to comply with set emission limits, and to improve their water and pollution management. Within 6 months, concrete plans of action must be reported on to the Bench Marks Foundation who can at least play a monitoring role, and other relevant authorities, communities and workers. These plans must take the voices of communities into consideration, and further demonstrate how they will measure CO₂ and SO₂ emissions per operation.
- Given the cumulative impacts of emissions and the need for collective action by the mining companies to deal with this problem, the Bench Marks Foundation calls for all the mining houses in the Bojanala District to meet and agree on a collective plan of action. This plan must have set timelines and must aim at drastically lowering emissions. Furthermore, it must cover how to deal with the impacts of the emissions on air and water quality, land and biodiversity, and the health impacts for people in the local community in addition to how these impacts affect community livelihoods, subsistence farmers, and larger agricultural farmers.

7.8 Specific company recommendations

7.8.1 Anglo Platinum

The Bench Marks Foundation recommends that:

- Anglo Platinum sets clear targets for employment of locals and that these targets must be negotiated with local communities. The company must submit regular progress reports (on the numbers employed, and quality of the employment, etc.) to the communities.
- Anglo Platinum employs more women workers at all levels of the company guided by the principle of equal pay for work of equal value. In addition, the company must make workplaces safe for the women workers. This includes separate change room facilities, separate toilet facilities, and careful thought to the balance of the number of women and men in each work team. Annual medical examinations must afford more privacy to the employees being examined; therefore the collective examinations of mineworkers must come

to an end. Furthermore, Anglo Platinum needs to educate male workers, and institute sanctions against men who abuse women in the operations. The Bench Marks Foundation further calls on Anglo Platinum not to use local chiefs or councilors as recruitment officers, as some of these individuals exploit their positions of relative power, to demand sex or money in return for employment.

Anglo Platinum immediately reduces its emissions of CO₂ and SO₂ to come within the required limits, as it is completely unacceptable that the company continues to exceed the emission limits. Anglo admits to elevated levels of nitrates in water sources in proximity to its operations because the fact that platinum mining causes elevated levels of nitrates in water sources is welldocumented in the literature. The Bench Marks Foundation calls on Anglo Platinum not to shift blame to informal settlements and local communities by blaming the sewage system or pit latrines for the problem, because indirectly the living-out allowance policy contributes to increased pressure on the sewage system and to increased pit latrines. We recommend that Anglo Platinum assumes responsibility for both the direct and indirect effects of its operations causing inflow of nitrates into the water sources in the area. Anglo Platinum must take action both to end the inflow of nitrates into the water directly from its operations, and to include improvement of the local sewage system in their CSR programme. Anglo Platinum must also put an end to the use of the living-out allowance that exacerbates this problem and enter into negotiations with the National Union of Mineworkers to address the living conditions of mine workers with a view to internalising the cost, and developing proper family and subsidised accommodation.

7.8.2 *Impala*

The Bench Marks Foundation recommends that:

• Impala Platinum sets clear targets for employment of locals and that these targets must be negotiated with local communities (this applies to all mining companies operating in the Bojanala District). The company must submit regular progress reports (on the numbers employed and quality of the employment, etc.) to the communities. Impala Platinum has a heavy reliance on sub-contracted labour, and we suggest that the high levels of fatalities at

its Rustenburg operations are related to its dependence on sub-contracted labour. The Bench Marks Foundation therefore supports COSATU's call to ban labour brokering and subcontracting, and call on Impala to give serious attention to these issues. Furthermore, despite efforts to improve literacy levels, these have not improved at the Impala operations in South Africa since Policy Gap 1 was published. We also find it disturbing that Impala informs local communities that they cannot be employed on its mining operations because they lack mining experience, or because local matriculants do not have maths and science, while the company has a 40% level of illiteracy among its employees. We suspect that Impala prefers subcontracted and migrant labour, because it does not need to train these employees (with previous experience), and matriculants might demand higher wages than illiterate workers. Impala must increase the number of workers employed locally.

- Impala place greater emphasis on safety bonuses and significantly scale down productivity bonuses, as sub-contracting and the use of productivity bonuses further compromise workplace safety at Impala's Rustenburg operations.
- Impala immediately set up proper booms and bridges at rail crossings (this applies to all mining companies operational in the area). The Bench Marks Foundation notes with concern the number of unguarded rail crossings in and around the Impala operations, particularly in the proximity of Luka and Chaneng, and finds it disturbing that Impala has been operational in the area for many decades, and have not seen it fit to put up bridges or proper booms at these crossings. We find it completely cynical that big billboards depicting a taxi being hit by a train has been placed at these crossings, instead of booms or bridges. The Bench Marks Foundation calls on Impala to immediately rectify this.
- Impala bring the shafts in the Bafokeng area, that are on the verge of depletion, to proper closure and completion. The Bench Marks Foundation will carefully monitor whether Impala intends to sell these shafts to less able operators before mine closure.

7.8.3 Aquarius

The Bench Marks Foundation recommends that:

- Aquarius should set clear targets for employment of locals and that these targets must be negotiated with local communities. The company must submit regular progress reports (on the numbers employed, and quality of the employment, etc.) to the communities. The Bench Marks Foundation finds it disturbing that this company sets its reliance on sub-contractors as a production aim. The Bench Marks Foundation's report shows that 90% of the Aquarius labour force is composed of sub-contractors. Sub-contracted workers are excluded from the same benefits as permanent employees, and while this represents an improvement in cost efficiencies for the corporation, it externalises costs to the society of health, pensions and housing.
- Aquarius employ mine workers permanently and end their use of subcontractors and labour brokers. The Bench Marks Foundation supports COSATU's call to ban labour brokering and sub-contracting, and call on Aquarius to give serious attention to this issue.
- Aquarius' shareholders should consider changing their board. The Bench
 Marks Foundation notes with dismay the politically loaded board composition
 of Aquarius. The presence of senior political figures or their close relatives
 on the boards of mining operations undermines democracy in South Africa,
 given the serious conflict of interest, calling into question the impartiality of
 the state.
- Furthermore, Aquarius should adhere to standards as they relate to Australian mining operational standards with regard to air, water, land and communities.

7.8.4 Xstrata

The Bench Marks Foundation recommends that:

- Xstrata set clear targets for local employment. These targets must be negotiated with local communities, and the progress on local employment must be open to community verification on a monthly basis.
- Xstrata employ mine workers permanently and end their use of subcontractors and labour brokers. The Bench Marks Foundation supports

- COSATU's call to ban labour brokering and subcontracting, and call on Xstrata to give serious attention to this issue.
- Xstrata rectifies the impression among mine workers that it discriminates
 against employees with HIV/AIDS, and works towards re-establishing trust in
 its own health facilities. At the moment, mine workers from Xstrata are using
 government clinics, so as to avoid the mine's clinics. This is causing tension
 between mine workers and local communities.
- Xstrata should issue local sustainability reports per operation and locality.

7.8.5 Lonmin

The Bench Marks Foundation recommends that:

- Lonmin significantly contributes through their CSR programme to fix the sewage system around Marikana, clean up the bilharzia infected water sources in the area, and revive commercial agriculture in the area.
- Lonmin ends the use of local chiefs or councilors as recruitment officers, as some of these individuals exploit their positions of relative power, to demand sex or money in return for employment.

7.8.6 Royal Bafokeng Mining

The Bench Marks Foundation recommends that:

- The Royal Bafokeng Authority must not delay the judicial process with technicalities. We further recommend that the judiciary speed up the case dealing with the land dispute between the Royal Bafokeng Authority and the Land Owners Association, as the dragging out of this case is elevating local tensions and could lead to conflict.
- The Royal Bafokeng Authority to be more transparent in the dispersement of revenues derived from mining to villages currently under its authority. The Bench Marks Foundation suggests the creation of village development committees, whose responsibility it will be to draw up development plans for submission to the Royal Bafokeng Authority, and a more inclusive budget process.
- Royal Bafokeng Mining employ mine workers permanently and to end their use of sub-contractors and labour brokers. The Bench Marks Foundation supports COSATU's call to ban labour brokering and sub-contracting.

- Royal Bafokeng Mining set clear targets for employment of locals and that
 these targets must be negotiated with local communities. The company must
 submit regular progress reports (on the numbers employed, and quality of
 the employment, etc.) to the communities.
- The Royal Bafokeng Mining take due care not to damage cultural and heritage sites belonging to communities in proximity to its mining operations. The Bench Marks Foundation and the South African Council of Churches are imminently disturbed by the disrespect shown for community graves by prospectors employed by the Royal Bafokeng Mining around the Styldrift mine. One would have expected that a company that is presumably owned by the tribe would show more respect for the heritage sites of the tribe.

Annexure 1: Comparison of findings from Policy Gap 1 and Policy Gap 6

		RESPONSIBLE FOR
POLICY GAP 1 FINDINGS	REVIEW FINDINGS	REMEDIAL ACTION:
	Employee Health	
	Platinosis	
Silicosis: In Policy Gap 1 we made reference to silicosis. Anglo Platinum contested this, claiming that silicosis does not occur in the platinum mines due to the particular geology of the area. Taking this clarification into consideration we reviewed the literature and engaged with our communities to find that platinosis is a matter of concern.	Platinosis: Anglo Platinum reports to society did contain reference to platinosis. Other mining companies reviewed could do more to report on platinosis. Researchers encountered boarded employees in Ikemeleng, Luka and Chaneng who claimed to have worked in processing plants and to have been boarded on grounds of inadequate lung function.	Department of Health to do an investigation into the extent of platinosis amongst the population of Bojanala District in general, and those working in mines and processing plants or living in close proximity to mines and processing plants in particular. The Department of Labour to check health and safety measures to protect workers from platinosis at all mines and processing plants in Bojanala District.
	HIV/AIDS	
HIV/AIDS: We found reporting on HIV/AIDS to be problematic. We also found that although all companies did report on extensive HIV treatment programmes for their employees and spouses, and some CSR involvement in government/community programmes, that certain labour/housing policies such as the living-out allowance, pursued by mining companies aggravated the situation with regard to HIV/AIDS.	HIV/AIDS: We found that the same concerns we raised in Policy Gap 1 persist. The impact of the living-out allowance on informal settlement growth, backyard dwellings, sex work and substance abuse, all complicate effective interventions to prevent the spread of HIV/AIDS. We are particularly concerned about the impact of media reports that Xstrata Coal in Mpumalanga allegedly dismissed workers because of their HIV status, causing workers in their platinum operations to avoid mine clinics and flood community clinics.	Xstrata to reassure its mine employees that they will not be victimised or retrenched for being HIV positive, and rebuild employee trust in its mine health facilities. Mining houses should research how their housing and labour living-out policies contribute to HIV/AIDS and take remedial action.
Disability		
Disability reporting: We found that mining companies reported on lost time due to injuries and fatalities, but that while accurate information on the number of fatalities were contained in reports, nothing was said about the number and nature of injuries. No one	Disability reporting: Anglo Platinum now reports extensively on the redeployment of people who became physically challenged as a result of workplace accidents. The other corporations under review should be encouraged to do	All mining corporations must demonstrate their commitment to the redeployment of workers injured and made disabled at work. Mines contribute hugely to hearing loss. Not only must all mines reduce noise levels in the work place and ensure that

DOLICY CAR 4 FINDINGS	DEVIEW FINDINGS	RESPONSIBLE FOR
POLICY GAP 1 FINDINGS	REVIEW FINDINGS	REMEDIAL ACTION:
reported on how injured workers were redeployed in operations. No one reported on CSR spent on institutions, and catering for physically challenged people. We found this to be an anomaly given that mining was one of the biggest contributors to loss of hearing in the South African population. Employee Safety: Policy Gap 1 found that there was a correlation between mine	the same. All corporations should contribute to institutions catering for the physically challenged and impaired, given their contribution to the numbers of people suffering such challenges as a result of mine accidents and working conditions. Employee Safety Employee Safety: The Review found that many of the same conditions giving rise to	workers have and use the necessary means to protect themselves against hearing loss, but mines also need to contribute more to institutions of learning and training for disabled/physically challenged people in general, but also to institutions for training and educating the deaf in particular. All mining companies must: Eliminate completely or reduce their reliance on
fatalities and: Productivity bonuses; A high platinum price; High levels of illiteracy in the labour force; Poor living conditions in informal settlements; The use of sub-contractors; and Seismic events. The Bench Marks Foundation predicted that as shaft mining goes deeper in the Bojanala District, there would be increased seismic activity and falls of rock incidents.	unsafe working conditions persisted on the mines in Bojanala District. We note a sharp decline in fatalities in 2009-10 which coincided with the global financial crisis, retrenchments and productivity cutbacks. We see a steady rise in mine accidents as the platinum price is gradually climbing back to US\$ 2000 an ounce (2011). We are especially concerned by Implats at its Impala Rustenburg Shafts. We suspect a strong correlation between the extensive use of sub-contractors and high fatality levels here. We note that Implats operates Ngezi Mine and, together with Aquarius, Mimosa Mine in Zimbabwe, both mines with first world health and safety records. We are convinced that these Zimbabwe mines have the excellent records that they do have, because of the high literacy levels on the labour force at both mines added to the fact that employees are local, and are properly housed in family housing. There are no informal settlements and no	contract workers significantly; Provide proper housing and accommodation for all their employees; Terminate the living-out allowance system; Investigate and resolve the contradiction between safety bonuses and productivity bonuses; Increase literacy training and ensure workers are able to read safety notices; and Emulate Ngezi and Mimosa standards on workplace safety.

POLICY GAP 1 FINDINGS	REVIEW FINDINGS	RESPONSIBLE FOR
	living-out allowance at Ngezi and Mimosa. We note increased fatalities at the shafts of Impala Rustenburg due to falls of rock as predicted in Policy Gap 1. 1's Health and Safety in the Wo Health and Safety: The review found that the Mining Charter has had unintended consequences for women: It puts women in danger, because 9% target for women in mining employment means effectively that 9 out of every 100 employees are women, which means that they are totally outnumbered when going underground; Not much thought has been given to the suitable deployment of female employees in jobs that would suite both their biological/physical and mental makeup; Men and women are still sharing ablution blocks and change rooms; Men and women do medical checkups together; and Women are generally recruited from local communities, while many	rkplace We call on the Department of Women, Children and People with Disabilities and the Department of Labour and the Human Rights Commission to investigate the conditions under which women are working in the mines, with special attention to: • Toilet and change room facilities for women; • How to prevent groping and abuse of women in the cages (lifts) that take workers into and out of mine shafts; • Transactional sex where human resource officers demand money or sex in return for work; • Transactional sex where women supplement their income towards month end by selling sex underground to male employees; • Abuse and groping of women during first aid training; • Lack of privacy for women during annual health
	andWomen are generally recruited from local	 Abuse and groping of women during first aid training; Lack of privacy for women
	on the mines in Bojanala District have reported that male HR officers demand either sex or bribes in return for jobs.	to trade their power to offer jobs in return for money or sex. All mining corporations must create conducive conditions that will allow women to work without suffering sexual abuse. The DMR must review the Mining Charter targets for the

POLICY GAP 1 FINDINGS REVIEW FINDINGS REPOISILE FOR REMEDIAL ACTION: employment of women in mines to create a healthier demographic balance as a counter to the sexual abuse of women in the workplace. The Bench Marks Foundation calls on all mines in the workplace or employees working with platinum. We note one study referring to platinum dust levels on London roads und the value of employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels on covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide Emissions: The Review found that most oriporations in such a small area needs to be considered. Air/Carbon Sin Sunday as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted at wariety of impacts of mining on the note of the populations of water unacceptably high. Water: The Review found that taraiting originates of mining on the notice with the platinum of the populations of water or the composition of the roads. Detailed medical studies are required to deal with this. Water: The Review found that most corporate reports to society for the companies operating in Bojanala District or to expendence and dust management practices. The Bench Marks Foundation calls on the Departments of Environmental Affairs to pursue or the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporations not adhering to the companies operating in Bojanala District to improve their waste and dust management practices. The Bench Marks Foundation calls on the Departments of Environmental Affairs to pursue or the companies operating in Bojanala District to timprove their waste and dust tradiusty of the contribute			
Air/Dust: We found high levels of dust, particularly around August/September in communities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. Air/Dust: We found high levels of dust particularly around August/September in communities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. Air levels of dust contribute to ear, nose and throat complaints within communities. We note studies in Britain and in the USA raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted hat although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted as Water: The Review found that make frous and advent to know how relevant monitoring government agencies will respond to such admissions.	POLICY GAP 1 FINDINGS	REVIEW FINDINGS	
Air/Dust: We found high levels of dust, particularly around August/September in communities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. Air/Dust: We found high levels of dust particularly around August/September in communities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. We note studies in Britain and in the USA raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to the catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted as were water. Policy Gap 1 noted as were well-acceptably high.			
Air/Dust: We found high levels of dust, particularly around August/September in communities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. Air/Dust: We found high levels of dust, particularly around August/September in communities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. Air Polity of the particularly around August/September in communities within communities. Air Polity of the particularly around August/September in communities within communities. Air Polity of the particularly around August/September in communities. We note studies in Britain and in the USA raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bittumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air Pollution Air/Carbon Dioxide and Sulphur Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines compiled with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even an eneed to be considered. It was indeed found that even an eneed to be considered. It was indeed found that even and the processing powernment agencies will respont to such admissions. However, the Bench Marks Foundation calls on the Departments of Environmental Affairs and Water: The Review found that most corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could			
Air/Dust: We found high levels of dust, particularly around August/September in communities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. In the sench Marks Foundation calls on all mines in the sommunities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. We note studies in Britain and in the USA raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably high platinum platinum dust levels on London for the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air Pollution Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered, it was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Water: Policy Gap 1 noted as a Mater Policy Gap 1 noted that was indeed found that even as far away as Bergsig High School emission levels were unacceptably high.			,
Air/Dust: We found high levels of dust, particularly around August/September in communities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. Air/Carbon Dioxide and Suphur Dioxide Emissions: The Rench Marks Foundation value of the suphur Dioxide Emissions: The Rench Marks Foundation calls on all mines in the Bojanala District to improve their waste and dust maste and dust maste and the suphur Dioxide and Suphur Dioxide Emissions: The Bench Marks Foundation calls on the Department of Environmental Affairs to and throat complaints within communities. We note studies in Britain and in the USA raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation calls on all mines in the Bojanala District to improve their waste and dust maste and dust roads used by mine whicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. The Bench Marks Foundation calls on the Department of Environmental Practices. The effectively deploy the Green scorpions in areas where their waste and dust roads used by mine whicles. Elevated levels of dust contribute to ear, nose and throat complaints within			
Air/Dust: We found high levels of dust, particularly around August/September in communities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. Air Pollution Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted at many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Air/Custon Water: We found high levels of dust particularly around August/September in communities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. We note studies in Britain and in the USA raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to to catalytic converters on vehicles. The dust tevels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most individual mines compiled with ISO standards, the cumulative operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most composition of the roads. Detailed medical studies are required to deal with this. The Bench Marks Foundation calls on the Department of Environmental Affairs and very composition of the roads. Detailed medical studies are required to deal with this. The Bench Marks Foundation calls on the Department of Environmental Affairs and very composition of the roads. Detaile			women in the workplace.
levels of dust, particularly around August/September in communities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. In the distroads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. In the distroads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. In the USA raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably high due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual minace an eeds to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Water: Water Water: Policy Gap 1 noted a Ievels of dust particularly around August/September in communities living in close proximity to tailings dams and dust roads used by mine communities and were honest enough to report this. However, the Bench Marks Foundation such as Anglo Platinum dust levels even on pake and bush this. The Review found that most corporation such as Anglo Platinum dual to penalise mining operations or waste management stretices. The Bench Marks Foundation is curious to know how relevant monitoring government agencies will general particularly and the province of the composition of the roads. Detailed medical studies are required to deal with this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will government departments and agencies s			
around August/September in communities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. ### State	_	_	
communities living in close proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. **The Bench Marks Foundation calls on the Department of Environmental Affairs to dust contribute to ear, nose and throat complaints within communities. We note studies in Britain and in the USA raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. **Air/Carbon Dioxide and Sulphur Dioxide Emissions:** Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. **The Bench Marks Foundation calls on the Departments of Environmental Affairs to defectively deploy the Green scorpions in areas where there is intensive mining operations of the platinum. We note one study referring to platinum dust levels on London roads due to to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. **Air/Carbon Dioxide and Sulphur Dioxide Emissions:** The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation calls on the Departments of En	· ·		
proximity to tailings dams and dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. Britain and in the USA raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO Standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted a Water: The Review found that tonacceptably high. Water: Policy Gap 1 noted as Water: The Review found that tonacceptably high. Water: Policy Gap 1 noted a Water: The Review found that tonacceptably high.			
dust roads used by mine vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. In the Bench Marks Foundation calls on the Department of dust contribute to ear, nose and throat complaints within communities. In the use of dust contribute to ear, nose and throat complaints within communities. In the use of dust contribute to ear, nose and throat complaints within communities. In the use of dust contribute to ear, nose and throat complaints within communities. In the use of the platinum, we note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO. Standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Air/Carbor Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO wover, the Bench Marks Foundation although most individual mines complied with ISO wover. The Bench Marks Foundation although most individual mines complied with ISO signal and District exceeded emission levels were unacceptably high. Air/Carbor Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted as were the proposition of the roads. Detailed medical studies are required to deal with this. Fire Bench Marks Foundation calls on the Department of dust control to effectively deploy the Green scorpions in aceas where in the subdivision of weather tha		•	
vehicles. Elevated levels of dust contribute to ear, nose and throat complaints within communities. and throat complaints within communities. We note studies in Birtian and in the USA raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted a Water: The Review found that most corporate reports to society for work from the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring corporations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice.			
dust contribute to ear, nose and throat complaints within communities. dust contribute to ear, nose and throat complaints within communities. We note studies in Britain and in the USA raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. dust contribute to ear, nose and the fective serior defictively deploy the Green scorpions about prefer studies and in the USA raising concerns about the platinum dust levels even on paved and bitumen coverder oads in Rustenburg are visibly considerably higher on a paved and bitumen covered roads in Rustenburg are visibly considerably higher on paved and bitumen covered roads in Rustenburg are visibly considerably higher on paved and bitumen covered roads in Rustenburg are visibly considerably higher on paved and bitumen covered roads in Rustenburg are visibly considerably higher on paved and bitumen covered roads in Rustenburg are visibly considerably higher on paved and bitumen covered roads in Rustenburg are visibly considerably higher on paved and bitumen covered roads in Rustenburg are visibly considerably higher on paved and bitumen covered roads in Rustenburg are visibly considerably			
and throat complaints within communities. We note studing there is intensive mining and to penalise mining operations or members on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. and throat complaints within communities. We note studies. We note studies. We note studies such as there is intensive mining and to penalise mining operations in there is intensive mining and to penalise mining operations in there is intensive mining and to penalise mining operations in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation calls on the Departments of Environmental Affairs and Water Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice.			•
communities. We note studies in Britain and in the USA raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that atthough most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Airarbon Dioxide and Sulphur Dioxide Emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water Water: Policy Gap 1 noted a Water: The Review found that Water: The Review found that The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant and therefore effective. The Bench Marks Foundation therefore calls on the Government of change legislation and regulations to make fines significant and therefore effective. The Bench Marks Foundation therefore calls on the Government of course with dismay that mining ocorporations in a change companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions.	*	•	
hin Britain and in the USA raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted a Water: The Review found that Water: The Review found that Water: The Review found that The Bench Marks Foundation calls on the Departments of Environmental Affairs and vorporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions.	•	•	1
raising concerns about Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. raising concerns about the workplace for employees working with legislation, regulations or waste management standards. The Bench Marks Foundation notes with dismay that mining companies do not mind paying insignificant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant and therefore effective. Air/Carbon Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted a Water: The Review found that to penal the at ont comply with legislation, regulations or waste management standards. The Bench Marks Foundation notes with dismay that mining companies do not mind paying insignificant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government Affairs and Water Affairs to pursue corporations not adhering to legislation and regulations to make fines significant and therefore calls on t	communities.		
Platinosis in the workplace for employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Platinum. We note one study referring to platinum dust levels one overtiment of standards, where unacceptably high. Water: The Review found that total the plate of the composition of the roads. Detailed medical studies are required to deal with this. Platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vaste management standards. The Bench Marks Foundation notes with dismay that mining continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant fines and therefore calls on the Government on the feotive. The Bench Marks Foundation calls on the Departments of Environmental Affairs and Water Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice. The Bench Marks Foundation to therefore edition therefore edition therefore edition therefore edition therefore each continue with bad continue with bad environmental practices. The Bench Marks Foundation cal			_
employees working with platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted a Water: The Review found that Water: The Review found that Water: The Review found that Water Stoundation, regulations or waste management standards. The Bench Marks Foundation notes with dismay that mining companies do not mind paying insignificant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant and therefore effective. Air Pollution Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most water and a were honest enough to report this. However, the Bench Marks Foundation is curious to deal with this. The Bench Marks Foundation therefore effective. The Bench Marks Foundation therefore effective. The Bench Marks Foundation and regulations to make fines significant and therefore effective. The Bench Marks Foundation continue with bad environmental Affairs and water society for the companies operating in the proving make fines significant and therefore effective. The Bench Marks Foundation continue with bad environmental Affairs and water affairs and			
platinum. We note one study referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Platinum We note one study referring to platinum dust tathoud to catalytic converters on vehicles. The Busch Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant and therefore effective. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water Water Water: Policy Gap 1 noted a Water: The Review found that Water: The Review found that The Bench Marks Foundation notes with dismay that mining companies do not mind paying insignificant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant and therefore effective. The Bench Marks Foundation therefore effective. The Bench Marks Foundation continue with bad environmental practices. The Bench Marks Foundation and regulations to corporations not adhering to environmental practices. The Bench Marks Foundation sales and required to deal with this. However, the Bench Marks Foundation theref			
referring to platinum dust levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Air/Carbor Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation to motes with dismay that mining companies do not mind paying insignificant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant and therefore cells on the Government to change legislation and regulations to make fines significant fines and continue with bad environmental practices. The Bench Marks Foundation therefore cells on the Government to change legislation and regulations to make fines significant fines and continue with bad environmental practices. The Bench Marks Foundation therefore cells on the Governmental Affairs and Water Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice. Water: Policy Gap 1 noted a Water: The Review found that			
levels on London roads due to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Ievels on London roads due to to catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably highs. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks However, the Bench Marks Foundation calls on the Government to change legislation and regulations to make fines significant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government and terefore effective. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission legislation and regulations and prosecute them. It is problematic that a mining companies dontinue with bad environmental Practices. The Bench Marks Foundation therefore effective. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporations on adhering to corporations on a defencion therefore effective.		1 .	_
catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Catalytic converters on vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably high. RivCarbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water Water: Policy Gap 1 noted a Cantinue with bad continue with bad continue with bad continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant and therefore effective. The Bench Marks Foundation calls on the Departments of Environmental Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining companies do not mind proving insignificant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government ochange legislation and regulations to make fines significant and therefore effective. The Bench Marks Foundation calls on the Departments of Environmental Affairs and Water Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is probl			
vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. vehicles. The dust levels even on paved and bitumen covered roads in Rustenburg insignificant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government deglations and therefore effective. The Review found that most corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice. Water: Policy Gap 1 noted a Water: The Review found that			
on paved and bitumen covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. On paved and bitumen covered roads in Rustenburg are visibly considerably highs are visibly considerably highs are visibly considerably high. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water: Policy Gap 1 noted a On paved and Sulstenabrug are visibly considerably higher due to the trucks carrying ore from mines to processing therefore calls on the Government to change legislation and regulations to make fines significant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government agensies or make fines significant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government denvire sugnificant fines and continue with bad environmental practices. The Bench Marks Foundation therefore calls on the Government denvire sugnificant fines and environmental practices. The Bench Marks Foundation therefore calls on the Government agensies or calls on the Departments of Environmental Affairs and Water Affairs to pursue corporations not adhering to error the companies operating in Bojanala District exceeded legislation and regulations and p		1	
covered roads in Rustenburg are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation calls on the Departments of Environmental Affairs and Water Water Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice. Water Water: Policy Gap 1 noted a Water: The Review found that The Bench Marks Foundation therefore calls on the Government al fregulations to make fines significant and therefore effective. The Bench Marks Foundation calls on the Departments of Environmental Affairs and Water corporations not adhering to legislation and regulations to make fines significant and therefore effective. The Bench Marks Foundation therefore calls on the Government algencies ociety for the companies operating in legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice.			
are visibly considerably higher due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation surious to know how relevant monitoring government agencies will respond to such admissions. Water Water: The Review found that However, the Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant and therefore effective. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant and therefore effective. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant and therefore effective. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant and therefore effective. The Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant and therefore effective. The Bench Marks Foundation calls on the Departments of Environmental Affairs and Water Affairs to pursue corporations not adhering to legislation and regulations and proven mental Affairs and Water Affairs to pursue corporations not adhering to legislation and regulations and proven mental Affairs and Water Affairs to pursue corporations not adhering to legi		•	
due to the trucks carrying ore from mines to processing plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation therefore calls on the Government to change legislation and regulations to make fines significant and therefore effective. Air Pollution Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation elgislation and regulations and Vater Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice. Water: Policy Gap 1 noted a Water: The Review found that The Bench Marks Foundation		9	
plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Plants, and also due to the composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water Water: Policy Gap 1 noted a Mair/Carbon Dioxide and Sulphur Dioxide Emissions: Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporation not adhering to legislation and regulations calls on the Departments of Environmental Affairs and Water Senvironmental Affairs and Water Senvironmental Affairs and Provision and regulations and provision and regulations calls on the Departments of Environmental Affairs to pursue corporations not adhering to legislation and regulations calls on the Departments of Environmental Affairs and Water Affairs to pursue corporations not adhering to legislation and regulations and provision such as Anglo Provision and regulations and provision such as Anglo Provision such as		due to the trucks carrying ore	Bench Marks Foundation
composition of the roads. Detailed medical studies are required to deal with this. Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice. Water Water: Policy Gap 1 noted a Water: The Review found that The Bench Marks Foundations I legislation and regulations to make fines significant and therefore effective. The Bench Marks Foundation calls on the Departments of Environmental Affairs and Water Affairs to pursue corporations not adhering to legislation and regulations and therefore effective. Water Spollution The Bench Marks Foundation calls on the Departments of Environmental Affairs and Water Spouration such scription and regulations and therefore effective.		from mines to processing	therefore calls on the
Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Detailed medical studies are required to deal with this. Air Pollution Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water: Policy Gap 1 noted a Mair/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporation that Departments of Environmental Affairs and Water Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice. Water: Policy Gap 1 noted a Water: The Review found that The Bench Marks Foundation		plants, and also due to the	Government to change
Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Tequired to deal with this. Air Pollution Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water Water: Policy Gap 1 noted a Water: The Review found that is. The Bench Marks Foundation calls on the Departments of Environmental Affairs and Water corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice. Water: The Review found that The Bench Marks Foundation calls on the Departments of Environmental Affairs and Water Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice.			
Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water Water: Policy Gap 1 noted a Mir/Carbon Dioxide and Sulphur Dioxide Emissions: Calls on the Departments of Environmental Affairs and Water story ocalison the Departments of Environmental Affairs and Water story ocalison the Departments of Environmental Affairs and Water story ocalison the Departments of Environmental Affairs and Water story ocalison the Departments of Environmental Affairs and Water story ocalison the Departments of Environmental Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice. Water: Policy Gap 1 noted a		Detailed medical studies are	
Air/Carbon Dioxide and Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water Water: Policy Gap 1 noted a Air/Carbon Dioxide and Sulphur Dioxide Emissions: The Review found that most corporation Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice. Water: Policy Gap 1 noted a Water: The Review found that The Bench Marks Foundation			therefore effective.
Sulphur Dioxide Emissions: Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Sulphur Dioxide Emissions: The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water Water: Policy Gap 1 noted a Sulphur Dioxide Emissions: Calls on the Departments of Environmental Affairs and Water Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice. Water The Review found that most corporate reports to society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know povernment agencies will respond to such admissions. Water: The Review found that The Bench Marks Foundation			
Policy Gap 1 noted that although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. The Review found that most corporation society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water Water: Policy Gap 1 noted a The Review found that most corporation society for the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will agencies such as the Green Scorpions do not take notice. Water: The Review found that most corporation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice.			
although most individual mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government agencies will respond to such admissions. Water Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice. Water: Policy Gap 1 noted a Water: The Review found that The Bench Marks Foundation	<u> </u>	_	
mines complied with ISO standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted a the companies operating in Bojanala District exceeded emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water: The Review found that The Bench Marks Foundation			
standards, the cumulative impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted a Bojanala District exceeded emission levice emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water Bojanala District exceeded emission and regulations and prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice.	1		· •
impact of having so many operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted a emission limits and were honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water Prosecute them. It is problematic that a mining corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice.	•		
operations in such a small area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted a honest enough to report this. However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water Water: The Review found that The Bench Marks Foundation			
area needs to be considered. It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted a However, the Bench Marks Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water Corporation such as Anglo Platinum could report exceedances and the two government departments and agencies such as the Green Scorpions do not take notice. Water: The Review found that The Bench Marks Foundation			•
It was indeed found that even as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted a Foundation is curious to know how relevant monitoring government agencies will respond to such admissions. Water Foundation is curious to know how relevant monitoring government departments and agencies such as the Green Scorpions do not take notice. Water: The Review found that The Bench Marks Foundation			ı ·
as far away as Bergsig High School emission levels were unacceptably high. Water: Policy Gap 1 noted a how relevant monitoring government agencies will respond to such admissions. Water exceedances and the two government departments and agencies such as the Green Scorpions do not take notice.		•	
School emission levels were unacceptably high. School emission levels were unacceptably high. School emission levels were unacceptably high. School emission levels were government agencies will agencies such as the Green Scorpions do not take notice. Water: Water: Policy Gap 1 noted a Water: The Review found that The Bench Marks Foundation			•
unacceptably high. respond to such admissions. agencies such as the Green Scorpions do not take notice. Water: Policy Gap 1 noted a Water: The Review found that The Bench Marks Foundation		_	
Water: Policy Gap 1 noted a Water: The Review found that The Bench Marks Foundation		, ,	
Water: Policy Gap 1 noted a Water: The Review found that The Bench Marks Foundation	andooptably ingil.	respond to sacri dumissions.	
Water: Policy Gap 1 noted a Water: The Review found that The Bench Marks Foundation		Water	Coorpions do not take notice.
	Water: Policy Gap 1 noted a		The Bench Marks Foundation

		RESPONSIBLE FOR
POLICY GAP 1 FINDINGS	REVIEW FINDINGS	REMEDIAL ACTION:
water in the Bojanala District including: • Excessive consumption; • Dropping of the groundwater table where open cast mining occurs; • Elevated levels of sulphides and nitrates in the water; and • Location of tailings dams and rock waste facilities too close to water sources.	persisted, and that new impacts emerged in the Bojanala District including: Excessive consumption; Dropping of the groundwater table where open cast mining occurs; Elevated levels of sulphides and nitrates in the water; Location of tailings dams and rock waste facilities too close to water sources; and Backyard dwellings and informal shacks housing workers on the living-out allowance particularly in Marikana's RDP village next to Lonmin's Karee mine, have caused unsustainable pressure on the sewage system with sewage points bursting and pouring into the river which is now contaminated with Bilarzia as a result.	Environmental Affairs and Water Affairs to pursue corporations not adhering to legislation and regulations and prosecute them. As already indicated, it is difficult to explain that a mining corporation such as Anglo could report exceedances and the two government departments and agencies such as the Green Scorpions not take notice. The Bench Marks Foundation calls on the Departments of Environmental Affairs, Water Affairs and Human Settlements to act on the environmental and water matters raised here. The Bench Marks Foundation further calls on the Department of Human Settlements to visit and appraise itself of the appalling conditions under which communities are living in the shadow of some of the richest mines on the planet, and deal with the concerns of communities.
	Rail Crossings	
Rail Crossings: Policy Gap 1 did not look at rail crossings at all.	Rail Crossings: Communities pointed out the discrepancy in Policy Gap 1 and insisted on the matter of rail crossings be included in the review. There are numerous unguarded/unbridged rail crossings in Bojanala District, all serving platinum mines and running mine locomotives and rolling stock. None of the crossings are guarded, none have booms and none have bridges that would prevent accidents with motor vehicles and trucks.	The Bench Marks Foundation calls on Anglo Platinum, Impala Platinum and Lonmin/Lonplats to show concern for the safety of communities living in proximity to their mines to put bridges and booms at all railway crossings. The fancy warning boards currently at crossings are just so much advertising, while bridges and booms will solve the problem of train/vehicle and pedestrian collisions. Mining corporations will argue that this is the task of local, provincial or national authorities, however the trains are company owned and operated, and making the

POLICY GAP 1 FINDINGS	REVIEW FINDINGS	RESPONSIBLE FOR REMEDIAL ACTION:
		crossings secure is a small
		cost measured against the
		enormous profits realised by
		these mining operations.
	Cracked Housing	
Cracked Housing: Policy	Cracked Housing: Nothing	The Bench Marks Foundation
Gap 1 pointed to this problem	has changed in the interim	calls on the Department of
which is a major cause for	between Policy Gap 1 and the	Human Settlements to
dissatisfaction in all	Review with regard to cracked	intervene in the matter of
communities studied except	housing. Even houses	cracked housing as a result of
Ikemeleng.	constructed by mining	mining in the Bojanala District.
	companies for example in	Some of the cracked housing
	Chaneng are showing severe cracks as a result of blasting.	is low-cost housing constructed with tax payer's
	Surely the mining company	money and where the cracks
	involved will not admit to	are caused by mining
	inferior architecture and	operations; this represents an
	construction which is the usual	externalisation of costs by the
	excuse offered for cracked	mining companies.
	housing.	
	Unguarded pits	
Unguarded abandoned open	Unguarded abandoned open	All mining companies must
pits: This is also an issue that	pits fill up with water and	see to it that these open pits
Policy Gap 1 failed to detect.	become attractive swimming	are at least fenced in and
	places for children. There	supervised by security guards.
	have been drowning at one such pit close to Luka and	
	Chaneng.	
	HIV/AIDS and communities	
HIV/AIDS: Policy Gap 1	HIV/AIDS: The Review found	While noting the interventions
established a direct link	that much of the conditions	by mining corporations such
between:	giving rise to HIV/AIDS in	as Anglo Platinum and Impala
 HIV/AIDS and migrant 	Bojanala District remain	Platinum with regards to
labour;	unchanged from the time	HIV/AIDS in the communities
HIV/AIDS and informal	when Policy Gap 1 was	of Bojanala District, it is the
Settlements; and	published. There has not been	opinion of the Bench Marks
HIV/AIDS and backyard	a significant change with	Foundation that these
dwellings	regard to informal settlements	interventions are wholly
	and backyard dwellings. If	inadequate.
	anything, these have increased with the increase in	
	the number of mining	
	operations in Bojanala District.	
Conflicts of Interest		
Conflicts of Interest: Policy	Conflicts of Interest:	The Bench Marks Foundation
Gap 1 found major conflicts of	Unfortunately this trend	calls on Parliament to pass
interests as mining companies	continues and is undermining	the necessary laws and
scrambled to lure senior	democracy and the faith of	regulations that will prevent
members of political parties	communities in elected	mining corporations from
and civil servants onto their	institutions in the Bojanala	harvesting members of
boards.	District.	parliament, ministers and civil
		servants to serve on their

POLICY GAP 1 FINDINGS	REVIEW FINDINGS	RESPONSIBLE FOR REMEDIAL ACTION:
		boards or in senior management positions in mining companies. We support COSATU's recently launched campaign in this regard.
Land Issues, Disputes		
Land Issues and Disputes: Policy Gap 1 did not say much about the land disputes in Bafokeng.	Land Issues and Disputes: Bench Marks Foundation found great unhappiness about the land issue in Chaneng and Luka. This is a matter that needs to be resolved urgently.	The Department of Rural Development and Land Reform as well as the Courts should urgently deal with this matter.
Employment/Unemployment		
Employment and Unemployment: Policy Gap 1 pointed out that the reliance on migrant labour and sub- contractors was an issue creating huge unhappiness among local communities suffering severe unemployment.	Employment and Unemployment: In 2011, violent protests broke out which were led particularly by the unemployed youth in Marikana, Ikemeleng and Chaneng.	All mining corporations, Department of Labour, Department of Home Affairs, (cooperative governance) Local, District and Provincial Government should address this issue.

Bibliography

Adams, F. "Mine Health and Safety Inspectorate Annual Report 2009/10." Retrieved October 23, 2011, from Parliamentary Monitoring Group: http://www.pmg.org.za/report/20110802-department-mineral-resources-annual-report-200910-mine-health-and-saf

Anglo Platinum. (2010). *Anglo Platinum Limited Annual Report.* Johannesburg: Anglo Platinum.

Aquarius. (2010). Annual Report. Johannesburg: Aquarius.

Babbie, E. & Mouton, J. (2001). *The Practice of Social Research*. Oxford: Oxford University Press. 674 p.

Babiak, P. & Hare, R. D. (2006). *Snakes in Suites: When Psychopaths Go to Work.* New York: Harper.

Bafokeng Land Buyers Association (29 March 2011) "A brief on the 'Public Policy Dialogue on Mining, Communities, and Workers' Conference' funded by the Foundation for Human Rights." http://bafokeng-communities.blogspot.com/2011_03_01_archive.html

Bafokeng Platinum. (2010). *Integrated Annual Report.* Phokeng: Royal Bafokeng Platinum.

Bakan, J. (2004). *The Corporation: The Pathological Pursuit of Profit and Power.* London: Constable.

Bench Marks Foundation. (2003). Principles for Global Corporate Responsibility: Bench Marks for Measuring Business Performance. Marshalltown: Steering Group for Global Principles Network.

Bench Marks Foundation. (2007). *The Policy Gap: A Review of the Corporate Social Responsibility Programmes of the Platinum Mining Industry in the North West Province*. Report by David van Wyk. Johannesburg: The Bench Marks Foundation.

Benya, A. P. (2009). Women in Mining: A Challenge to Occupational Culture in Mines. University of the Witwatersrand, Faculty of Social Science and Humanities, Johannesburg.

Bernstein, A. (2010). *The Case for Business in Developing Countries*. Johannesburg: Penguin Books.

Bernstein, H. (2005). "Rural Land and Land Conflicts in Sub-Saharan Africa." In S. Moyo, & P. Yeros (Eds.), *Reclaiming the Land: The Resurgence of Rural Movements in Africa, Asia and Latin America*, pp. 67 - 101. Cape Town: David Phillip.

Bond, P. (2005). Elite Transition. Scottsville: University of KwaZulu Natal Press.

Bond, P. (2007, April/May). "Corporate Tsotsis in Africa." mind//shift (3).

Breutz, P. (1987). History of the Batswana. Margate: Breutz.

Brummer, D. (May/November 2002). Labour Migration and HIV/Aids in Southern Africa. International Office on Migration, Regional Office for Southern Africa, Johannesburg.

Career Junction Lonmin. http://www.careerjunction.co.za/companies/lonmin-platinum-26410

Carol, C. (2010). "Chairman's Statement." In Anglo Platinum, *Anglo Platinum Limited Annual Report*, pp. 2-3. Johannesburg: Anglo Platinum.

Comaroff, J. L. & Comaroff, J. (2009). *Ethnicity, Inc.* Scottsville: University of KwaZulu Natal Press.

COSATU. (2009). "NUM, Mine, Construction and Energy Workers." *The Shopsteward*,12-15.

Cronjé, J.F., Chenga, C. S. & Naudé, A.M.E. (2005). *Final Research Report: Community Development Needs*. Conducted as Phase 3 of a Stakeholder Perception Survey for Lonmin Platinum. Potchefstroom, South Africa. 86pp.

Cronjé, J. F. & Chenga, C. S. (2007). "Health Issues in a Mining Community of South Africa," in T. Falola, & M. M. Heaton (Eds.): *HIV/AIDS, Illness and African Well-Being.* Rochester N.Y.: University of Rochester Press.

Davidson, B. (1977). "Guinea Bissau: People's Elections." In Frelimo, *Peoples Power, Number b6: Mozambican Women's Conference*, pp. 27-31. London: MAGIC.

Davis, M. (2011). "CEO's Report." In Xstrata, *Xstrata plc Sustainability Report*, pp. 8-10. Zug, Switzerland: Xstrata.

Foucault, M. (1994). *Power: Essential Works of Foucault, 1954-1984* (Vol. 3). Edited by J. D. Faubion. London: Penguin Books.

Golder Associates. (2011). Draft Scoping Report: Lonmin Eastern Platinum Limited (EPL) (Report 13084).

Green Health Watch. (2011). "Platinum in Road Dust." Retrieved October 18, 2011, from Green Health Watch:

http://www.greenhealthwatch.com/newsstories/newstransport/platinum-in-road-dust.html

ICEM. (2011, February 23). "Xstrata Coal South Africa Accused of Sacking HIV-Positive Miners." Retrieved October 27, 2011, from International Federation of Chemical, Energy, Mine and General Workers' Unions: http://www.icem.org/en/72-HIV-AIDS/4271-Xstrata-Coal-South-Africa-Accused-of-Sacking-HIV-Positive-Miners

Implats. (2008) Implats Corporate Responsibility report. Johannesburg: Implats. http://www.implats.co.za/cr/reports/2008/profile.htm

Implats. (2010 - 2011). Implats Integrated Annual Report. Johannesburg: Implats.

Implats. (2011). Implats Sustainable Development Report. Johannesburg: Implats.

International Organisation on Migration (May/November 2002), Labour Migration and HIV/Aids in Southern Africa. Johannesburg. IOM Regional Office for Southern Africa

International Organisation on Migration. (2010). Regional Assessment on HIV-Prevention Needs-

Jacobson, D. (1947). Maize Turns to Gold. London: George Allen - Unwin Ltd.

Jeebhay, M. F. (2009, November/December). "Work-related asthma." Retrieved October 23, 2011, from CME Ajol.info:

http://www.ajol.info/index.php/cme/article/viewFile/50331/39018

Jensen Dental. (2010, March 29). "Precious Alloys and Solders." Retrieved October 23, 2011, from Jensen Dental: http://www.jensendental.com/alloy/pdfs/Jensen-Dental-MSDS.PDF

Klein, N. (2005). No Logo. London: Harper Perennial.

LonminPLC. (2010). We-based Sustainable Development Report for the Year Ending 30 September 2010. Johannesburg: Lonmin.

LonminPLC. (2011). *Interim report for the xix months to 31 March.* Johannesburg: Lonmin.

Lurie, M. N., Williams, B. G., Zuma, K., Mkaya-Mwamburi, D., Garnett, G. P., Sturm, A. W., Sweat, M. D., Gittelsohn, J. & Karim, S. S. A. (2003). "The impact of migration on HIV-1 transmission in South Africa: a study of migrant and non-migrant men, and their partners." Sexually Transmitted Diseases, Vol. 30(2), Pp. 149-156.

Mamdani, M. (2005). "Political Identity, Citizenship and Ethnicity in Post Colonial Africa. In *Arusha Conference*, "New Frontiers of Social Policy: Development in a Globalising World" (pp. 1-18). Arusha: World Bank.

Maoto, M. (2012) "Anglo cuts production targets" in Businesslive. 13 Feb. 2012. Retrieved on 30 April 2012 from

http://www.businesslive.co.za/southafrica/sa_companies/2012/02/13/anglo-platinum-cuts-production-targets.

Mathews, C. (2012). "Paying Out Under Pressure". Retrieved on 14 March 2012 from Financial Mail. http://www.fm.co.za.

Maylam, P. (2005). *The Cult of Rhodes: Remembering an Imperialist in Africa.* Claremont: David Phillip.

Mbenga, B. K. (1996). "The Bakgatla-Baga-Kgafela in the Pilanesberg District of the Western Transvaal from 1899 to 1931." *D, LITT et PHIL Thesis*. Pretoria: University of South Africa.

Merget, R., Schulte, A., Gebler, A., Breitstadt, R., Kulzer, R. & Bfrendt, E. D. (1999). "Occupational Asthma Reference." Retrieved October 23, 2011, from Outcome of occupational asthma due to platinum salts after transferal to low-exposure areas: http://www.occupationalasthma.com/occupational_asthma_viewreference.aspx?id=140

Mokhele, K. (2011). "Chairman's Report." In Implats, *Implats Integrated Annual report* (pp. 9 - 11). Johannesburg: Implats.

Nicoleau, N. (2010). "Interview with Anglo Platinum's CEO, Neville Nicoleau." In A. Platinum, *Anglo Platinum Limited Annual Report*, pp. 10-11. Johannesburg: Anglo Platinum.

North West Provincial Government: Department of Agriculture. (2008). "North West Province Environment Outlook: Report on the State of the Environment 2008." Retrieved October 24, 2011, from NWPG:

http://www.nwpg.gov.za/Agriculture/NW_ENVIRONMENTAL_OUTLOOK/chapter.as p?CHAPTER=2&PAGE=3&TITLE=Driver%201:%20Demography%20and%20human %20well-being

Parker, F. (2012) "TB control in mines disappoints." Mail and Guardian Online. Accessed: 06 May 2012. http://www.mg.co.za/article/2012-03-09-tb-control-in-mine-disappoints.

Prozesky, H. & Mouton, J. (2001). "The participatory research paradigm." In Coetzee, J.K., Graaff, J., Hendricks, F. & Wood, G., (eds.): *Development: Theory, Policy and Practice*, pp. 536-551. South Africa: Oxford University Press.

Radebe, S. (2011, Feb 8). "Anglo Platinum to invest billions into communities." Retrieved October 23, 2011, from The New Age: http://thenewage.co.za/9902-9-53-Anglo_PLatinum_to_invest_billions_into_communities

Reuters. (2011, May 24). "Lonmin starts sacking 9, 000 over Marikana strikes." Retrieved October 29, 2011, from Reuters:

http://www.reuters.com/article/2011/05/24/lonmin-idUKLDE74N1DL20110524

Royal Bafokeng Holdings. (2010). Royal Bafokeng Holdings Annual Review. Phokeng: RBH.

Rustenburg Community Monitors. 2012. *Rustenburg Community Report*. Johannesburg: Bench Marks Foundation.

SABC. (2011, October 22). "North West mine agrees to employ locals." Retrieved October 29, 2011, from SABC:

http://www.sabc.co.za/news/a/74b74f8048c79a5d9f94bf8f1358246a/North-West-mine-agrees-to-employ-locals-20111022

SAPA. (2012). "Female Mine Worker Raped and Killed at Anglo Platinum's Khomanani Mine." Retrieved 14 March 2012 from Mine Safety. http://www.minesafety.co.za.

Sarantakos, S. (2005). Social Research. New York: Palgrave MacMillan. 464 p.

Segal, M. H. (1983). "Social Psychological Research Pointing Towards Localised Development Projects." In F. Blacker (ed), *Social Psychology and Developing Countries*, pp. 105-129. Chichester: John Wiley & Sons.

Selin, S. W., Pierskalla, C., Smalldone, D., & Robinson, K. (2007)." Social Learning and Building Trust through a Participatory Design for Natural Resource Planning." *JOURNAL OF FORESTRY*, 222-225.

Seoka, J. (2003). Preface. In S. G. Network, *Principles for Global Corporate Responsibility: Bench Marks for Measuring Business Performance* (p. ii). Johannesburg: The Bench Marks Foundation.

Thomas, A. (1996). Rhodes: The Race for Africa. Johannesburg: Jonathan Ball.

Treasury. (2011). "2011/2012 Draft Integrated Development Plan (Final Draft) - Bojanala District." Retrieved October 24, 2011, from Treasury of the Government of South Africa:

http://mfma.treasury.gov.za/Documents/01.%20Integrated%20Development %20 Plans/2011-12/03.%20District%20Municipalities/DC37%20Bojanala%20Platinum/DC37%20Bojanala%20Platinum%20-%20IDP%20-%201112.pdf

US Department of Health and Human Services. (1978). Occupational health Guideline for Soluble Platinum Salts (as Platinum). National Institute for Health and Safety.

Welling, B. (2009). "Corporate Social Responsibility, A Well-Meaning but Unworkable Concept." *Corporate Governance e Journal*.

Wessels, V. (2011, August 24). "Marikana Output Halted by Community Protest, Business Report Says." Retrieved October 29, 2011, from Bloomberg: http://www.bloomberg.com/news/2011-08-24/lonmin-marikana-output-halted-by-community-protest-business-report-says.html

Westerman, E. J. (2008). *The Three Circles of Knowledge*. Chimanimani, Zimbabwe: CELUCT.

Xstrata. (2010). Sustainability Report. Zug, Switzerland: Xstrata.