



5<sup>6</sup> hundred millionaires created



# CDS RESEARCH REPORT

LED & SMME DEVELOPMENT



**Large mines and sustainable development: Towards partnerships with government**

2006 · NO 2



**CDS**  
Centre for Development Support  
Sentrum vir Ontwikkelingsteun

# **Large mines and sustainable development:** Towards partnerships with government

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Please reference as: Centre for Development Support (CDS). 2006. Large mines and sustainable development: Towards partnerships with government. *CDS Research Report, LED and SMME Development, 2006(2)*. Bloemfontein: University of the Free State (UFS).

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## EXECUTIVE SUMMARY

1. The paper compares the developmental proposals of 27 municipal Integrated Development Plans (IDPs) and 4 provincial development plans. It compares these proposals with the activities of 4 South African mines, as reflected in their company reports. At the same time, it compares these proposals and activities with government programmes in a variety of developmental fields.
2. Despite their well-known capacity problems, municipalities are key developmental agencies. They cover the whole of South Africa (“wall to wall local government”), and they increasingly function as inter-sectoral development co-ordinators, and they. They also have an elected democratic base. For these reasons, municipalities will play an increasingly important role in all aspects of Local Economic Development (LED), including agriculture, industry, commerce, tourism and mining. They are also responsible for poverty alleviation. An increasing number of developmental functions are being devolved to municipalities, and this is likely to have an impact on the ways that mines conceptualise, plan and implement community development.
3. Provincial governments are also an increasingly strategic level of government. They are responsible for province-wide social and economic planning, and the bulk of government social programmes are channeled through provincial government. It is now a requirement that all provincial governments draft provincial development plans. Most provincial plans say little or nothing about mining, largely because mining falls under a national-level department (DME), without a corresponding provincial department. The lack of provincial focus should be taken up with the DME by the Chamber of Mines.
4. The Mineral and Petroleum Resources Development Act of 2002, and the South African Mining Charter, require mines to promote the integrated socio-economic development for host communities and major labour-sending areas. The Charter also requires the involvement of mines with municipal IDP processes.
5. The concept of “sustainable development” is notoriously slippery, multi-dimensional, and prone to controversy. The meaning is value-laden, and may well change over time or from one context to another. Local discussion and negotiation is a critically important part of any development exercise, because it enables various relevant resources, assets, problems and interests to be identified.
6. The “sustainable livelihoods” (SL) approach is a useful conceptual tool to identify local assets, resources, opportunities and problems. It focuses on identifying what people are already doing, and then enables blockages or gaps to be identified. This means that SL is *asset-based*, and not based on needs or wishes. The paper argues that, by means of municipal IDPs, mines can assist municipalities to identify local assets and opportunities, and then identify appropriate mechanisms for overcoming obstacles in the full use of such assets and resources. Assets can be divided analytically into natural assets, infrastructural assets, financial assets, social assets, and personal assets. Identifying local assets is, by its nature, a very participatory process, since the local residents must be able to identify their own strengths, interests, opportunities and shortcomings.
7. Mines should align their initiatives with other relevant agencies (municipalities, NGOs, stakeholders), because many developmental issues transcend the spatial or legal jurisdiction of any one agency. This requires partnerships, at many different levels. The paper reviews programmes from several government departments: Education; Social Development; Health; Sport and Recreation; Safety and Security; Science and Technology; Housing; Trade and Industry; Agriculture; Environmental Affairs and Tourism; and Minerals and Energy. There are numerous programmes which offer possibilities for partnerships.
8. Mines should assist community members to become effective participants in development. However, community involvement may be very complex; community boundaries are often unclear; the rights and powers of specific community members may be controversial; and different sub-groups may have different interests. The only way to deal with such dilemmas would be by ongoing engagement with stakeholders. District and Local Municipalities may be a good place to start.
9. Mines’ contribution to sustainable community development can take several forms:
  - Get to understand the sustainable livelihoods approach, and the identification of skills, assets and blockages to the use of assets. New staff members need to get exposure and hands-on experience to using SL methodology.



- Get to know your District and Local Municipality, as part of the IDP process, but also as part of discussions on Local Economic Development, land reform, the use of social facilities, and other topics. Explore ways of institutionalizing partnerships, for example by municipal Section 21 companies.
- Make mine-related facilities and resources available (buildings, skills etc), for municipal use, where possible.
- Participate in municipal planning, notably the IDP, but also Water Services Plans, Transport Plans, LED plans, and spatial plans.
- Create partnerships (find facilitators if necessary) for developmental programmes in sectors which are not mines' core business (such as health and welfare).
- Create dedicated funds for draw-down community grants, or negotiate a dedicated municipal rates fund.
- Plan ahead for closure. The mining sector urgently needs to encourage national government to become involved in areas threatened within mining closure.
- Monitor outputs and impacts of development projects and programmes.
- Evaluate progress and share lessons amongst mining fraternity.

10. Municipal concerns and mining performance can be compared according to different developmental issues:

- 10.1 Social services: Education, health, welfare and recreation:** Municipalities are particularly concerned about additional clinics, as well as sharing mines' recreational facilities.
- 10.2 Housing, Infrastructure and spatial planning:** Municipalities are deeply concerned about settlement issues, including shack upgrading; building more houses; provision of family housing instead of hostels; appropriate land use, particularly in areas affected by mining; land use planning for mining in relation to agriculture and tourism; the provision of household infrastructure; and the provision of bulk infrastructure (water, electricity and roads). Provincial governments are particularly important in terms of regional spatial planning (especially development corridors).
- 10.3 Promotion of small-scale mining activities:** Several IDPs express the desire to promote small-scale mining, as a poverty alleviation measure.
- 10.4 Promoting job creation, entrepreneurship, BEE and training within the mining sector:** Municipalities are concerned about attracting capital investment for new business, job creation, local sourcing, and assisting small entrepreneurs.
- 10.5 Economic diversification and beneficiation:** Several municipalities show a concern with the finite nature of mining, and the need for proactive diversification.
- 10.6 Local taxation:** One municipal IDP mentioned the extension of the rates system to mines. This is likely to become a more prominent issue in the light of the new Municipal Property Rates Act of 2004.
- 10.7 Environmental management:** Many IDPs raise environmental concerns, including rehabilitation of old mines, environmental management in mining operations, environmental planning, and environmental health.

# 1 INTRODUCTION

This report argues that municipalities and government departments are key future stakeholders and possible partners in mines' initiatives to promote community development.

This paper does not focus on mines' internal human resource issues, although it should be kept in mind that human resource development may well have spin-off impacts on the host communities. Such beneficial impacts should, where possible, be amplified, and we will suggest some ways in which this may be done. In particular, issues of *employees' housing* are closely related to issues of *spatial planning*, and this has major consequences for local economic and social development. Furthermore, *training of staff* (e.g. ABET, skills training) has profound implications for employees' prospects during and after the life of the mine. The employment of *migrant labour* has massive implications for the labour-sending areas. The provision of *HIV/AIDS prevention and support* programmes to employees has major benefits for their families. But the primary focus, in this paper, will be on mines' attempts to promote development in the surrounding communities, as well as in labour-sending areas, in partnership with different types of government institutions.

Furthermore, this paper does not do justice to the many initiatives already undertaken by various mines. The research includes an overview of four mining companies (based on their own sustainable development reports). But a proper overview, comparison and evaluation of what is already being done, would be a different kind of exercise, and would be quite vast in scope.

The report highlights some of the conceptual and practical difficulties associated with SD. This is done to emphasise the fact that SD is conceptually woolly, value-laden, open to interpretation, and often complex and protracted to implement. The more the mines are aware of these difficulties, either due to their own painful experiences, or by learning from others, the more realistic we may be about what is possible (especially within given time frames and budgets).

It has been widely recognized that there is a contradiction at the heart of the concept of "sustainable mining communities". Mining is, by its nature, not sustainable, as the resource is not renewable. Hence a great deal of additional effort needs to be taken to allow mining communities to build up some capacity for sustainability, which will out-last the inevitable closure of the mines. It will be argued, below, that this is the key challenge for any sustainable development exercise.

The specific argument made by this report, is as follows:

1. There is increasing pressure by the South African government, as well as the international community, that mines need to take special efforts to promote sustainable development.
2. Promoting sustainable development of the surrounding communities requires *partnerships* and *alignment amongst mines and other organizations*. Mines cannot and do not have to go it alone. Much more can be achieved if mines can bolster programmes already identified by other stakeholders, or identify new joint initiatives.
3. Given the new 3-sphere constitutional order in South Africa, provincial, district and local government are taking on a new kind of developmental importance. They are designed as the "developmental cutting-edge" of the governmental system. Municipalities are important developmental agencies, for several reasons: (1) They cover all land area in South Africa; (2) They have statutory rights and powers (they can pass by-laws); (3) They are already "nested" within an intergovernmental system; (4) They are, intrinsically, *multi-sectoral* institutions; (5) They are specifically mandated to promote *integrated* development – i.e. spatial, racial, and economic integration; (6) They have formal processes of democratic election, accountability and participation – notably via the Ward Councillor and Ward Committee System.
4. *Municipal Integrated Development Plans (IDPs)* are particularly promising instruments for engaging with municipalities. Current and potential municipal functions need to be understood, to identify possible linkages and opportunities for co-operation between mines and municipalities.
5. *Eight developmental themes* will be identified, around which municipal-mining engagement can be structured. In each case, there will be a brief reflection on some proposals contained in a selection of IDPs; and a consideration of mining practice (as reflected in a selection of company reports). In addition, a brief review of

legislation which explicitly or implicitly encourages decentralization of developmental functions to municipalities.

6. Finally, some more concrete suggestions are made to strengthen mines' partnerships with other developmental institutions.

A few words of caution should be expressed. Many municipalities have "capacity problems", ranging from mild to severe dysfunctions. In some cases, these problems are teething problems, caused by several rounds of institutional restructuring; in others, drastic intervention by national or provincial government is required, and may not be immediately forthcoming. Ways should be found of engaging with such municipalities (which may be a time-consuming and frustrating process); and this should not hold up mines' own private development initiatives. It should be noted that there are constant attempts by national and provincial government to build municipal capacity; and if mines are cognizant of such efforts, and work in conjunction with them, it may well enhance the impacts of such capacity-building programmes.

This is not to argue that all development initiatives should be controlled, managed or initiated by municipalities. There are important roles for civil society (NGOs, CBOs and traditional organizations). But municipalities *may* play an important role in co-ordinating civil society initiatives, so that such activities can increase their scope, resources, and impact.

In sum, then, this paper presents an approach which brings together four elements: (1) *international guidelines and government policy* on sustainable development in mining; (2) *mines' community development initiatives*, given the practical and financial constraints that mines face; (3) *the growing developmental importance of provincial and municipal government*, and (4) the need for engagement with municipal *Integrated Development Plans (IDPs)* as an instrument of development planning.

## 2 METHODOLOGY

In this paper, the following sources were consulted:

1. *Government literature*: Relevant white papers, legislation, and regulations were examined.
2. *IDPs*: Initially, 41 IDPs were scanned for any inclusion of mining-related development issues. The municipal IDPs were selected on the basis of an existing (and incomplete) list of mines, and therefore it was already a selective sample. (Curiously, there were several localities where mines do indeed exist, but their IDPs made no mention of mining issues).

These IDPs were accessed from the "IDP Nerve Centre" website ([www.idp.org.za](http://www.idp.org.za)), managed by the Department of Provincial and Local Government. All municipalities are required to post their IDPs on the website, although not all of them comply with this.

All the available IDPs were scanned for references to "mines" or "mining". Ultimately only 27 IDPs contained usable information and proposals related to mining. In the selection of extracts, the focus was on future developmental initiatives, and not on mining facts or problems *per se*. These extracts were then sorted into themes. The entries range from substantial and well-considered proposals, to fleeting ideas which are more superficial and impressionistic. Nevertheless, even the superficial extracts are important, because they tend to indicate a groundswell of interest in specific topics or themes. Some of the IDPs were eventually not included at all, as their references to mining were simply too trivial or sketchy to warrant further attention.

From these IDPs, a short-list of themes was compiled. These are:

- Social issues: Health, welfare, education, recreation
- Housing, infrastructure and spatial planning
- Promotion of small-scale mining activities
- Economic diversification, particularly due to the prospect of mining closures
- Job creation and poverty alleviation
- Local taxation
- Environmental management
- Relationships with traditional communities
- Coping with closure.



3. *An overview of four company reports:* Recent Annual Reports of the following companies were scrutinized: Anglo Platinum, BHP Billiton, Kumba and Lonmin. The social development activities noted in these reports were compared to the themes which emerged from the IDPs.
4. *An overview of four provincial development strategies:* These include Limpopo, North West, Mpumalanga and the Free State. The strategies were accessed from the IDP Nerve Centre website.
5. *An overview of international literature and case studies:* A wide variety of South African and international reports and journal articles were consulted.

This paper has several methodological limitations:

1. Comparing IDPs and company reports raises the methodological difficulty that IDPs are future plans while company reports reflected past activities, so they are not completely comparable. IDPs cannot be regarded as a proper record of current activities in the same way as company reports may be.
2. The drafting of municipal IDPs is often outsourced to consultants, who would bring their own biases to bear.
3. There may be IDPs which were not consulted in this study, which may have interesting or unusual information.
4. In some ways, company reports are not always a good reflection of the diversity and depth of their operational initiatives; but simultaneously, company reports may gloss over problems experienced in the field.
5. Companies have very different national and international organizational profiles, which not only impact on their activities, but probably also on the ways that their reports are structured. The information in these reports may not, therefore, be strictly comparable.
6. The international literature is vast, and could not be adequately covered in this report.

It appears that there is not a complete, accurate and up-to-date list of mines available, *in relation to their municipal jurisdictions* (especially since municipal jurisdictions were changed dramatically in 2000). This, in itself, is cause for concern. It would be very useful for a central research agency to maintain such a data-base.

The procedure adopted in this report therefore has several shortcomings, and cannot be taken as definitive. *There is simply no substitute for careful local case studies.* The findings are necessarily tentative and incomplete, although they seem to give general impressions – which, in turn, may make a case for more detailed case studies and comparative research. At this stage, South Africa simply does not have the kind of empirical information on the impacts of mining on community development, comparable to countries such as Canada and Australia (see Appendix C). As early as 1981, for example, a Canadian edited volume (Roy T. Bowles (ed), *Little Communities and Big Industries*) included six case studies, as well as a detailed comparative analysis of previous research of “resource towns”, “single economy towns” and “instant towns”.

In South Africa, mining-related research has focused primarily on labour migrancy and mining hostels. There is a dearth of studies in South Africa on rural communities where mines are located, or on mining towns where mines have closed down, or towns which remain dependent on mining activities. We have very little systematic knowledge about the economic and social dynamics of towns such as Rustenburg, Stilfontein, Welkom, Hotazel, Springbok, Newcastle, Westonaria, and virtually nothing about the traditional rural areas in Limpopo, North West Province and Mpumalanga, where mines are increasingly being situated. A few small but significant studies have been published in academic journals<sup>1</sup>, but there has been no consistent comparative methodology to draw out the key themes.

This lack of consistent studies of mining communities is matched by an almost total lack of academic research institutions in South Africa that focus on small towns or rural development. South African rural development is primarily oriented towards land and agriculture (such as the Programme for Land and Agrarian Studies at the University of the Western Cape). In general, rural and mining issues are served under the general rubric of “economic and social research”, with the result that mining sociology has not received the attention it deserves. This contrasts with the numerous institutes in Canada and Australia which specialize on small towns and rural development.

There is an enormous need for mining-oriented social research to receive more research funding, and more prominence in university courses and institutes.

### 3 “SUSTAINABLE DEVELOPMENT”: SOME CONCEPTUAL ISSUES

#### 3.1 The new legal environment

In South Africa, a commitment to sustainable development is now legally required, in terms of the Mineral and Petroleum Resources Development Act (MPRDA, Act no. 28 of 2002). Section 1 of the Act defines “sustainable development” as the “integration of social, economic and environmental factors into planning, implementation and decision making so as to ensure that mineral ... resources development serves present and future generations”. The objects of the Act are, *inter alia*, to “... ensure that the holders of mining and production rights contribute towards the socio-economic development of the areas in which they are operating” (Section 2(i)).

The Act requires the drafting of an environmental management plan, which must be undertaken when a company applies for a reconnaissance, prospecting or mining permit. The concept of “environmental” is defined broadly, and it has to include the socio-economic conditions of any person who might be directly affected by the prospecting or mining operation. In effect, it requires the drafting of a Social Plan, stipulating the ways in which the company intends interacting with the local community during the lifetime of the mine. The Department of Minerals and Energy, as well as the Chamber of Mines, have published guidelines for the drafting of social and labour plans. This includes reference to Local Economic Development programmes to ensure poverty eradication and community upliftment in the area within which mining or production occurs, as well as the labour-sending areas. These guidelines also prescribe co-operation with the formulation of municipal Integrated Development Plans.

The South African Mining Charter goes even further. The Charter refers to the “imperative of redressing historical and social inequalities, and to “expand opportunities for historically disadvantaged persons to enter the mining and minerals industry or benefit from the exploitation of the nation’s mineral resources”. This includes “integrated socio-economic development for host communities, major labour-sending areas and areas that, due to unintended consequences of mining, are becoming ghost towns by mobilizing all stakeholder resources”.

The Charter introduces a “Scorecard” to give effect to its provisions. The Scorecard covers 9 topics:

- Human Resource Development
- Employment Equity
- Migrant labour
- Mine community and rural development
- Housing and living conditions
- Procurement
- Ownership and joint ventures
- Beneficiation
- Reporting.

Most of these requirements affect the in-house mining operations themselves (for example, companies’ human resource policies). But there is one significant exception: The requirement regarding “mine community and rural development” specifies the following:

“Has the company co-operated in the formulation of integrated development plans and is the company co-operating with government in the implementation of these plans for communities where mining takes place and for major labour sending areas? Has there been effort on the side of the company to engage the local mine community and major labour sending area communities? Companies will be required to cite a pattern of consultation, indicate money expenditures and show a plan”.

The issue of integrated development plans is highly significant, and will be addressed in more detail below.

Furthermore, international companies are increasingly expected to report in accordance with the Global Reporting Initiative (GRI) Guidelines. These Guidelines defines sustainability in terms of three separate elements (economic, environmental, and social). It requires the careful balancing of the complex relationships between these dimensions, in a manner that does not compromise future needs<sup>[2]</sup>.

In sum, companies need to align the following planning and monitoring systems:

- Their own private economic planning, for the financial and technical operation of the enterprise
- The Mining Charter requirements
- Environmental and social plans, as required by the MPRDA (200)

- Municipal IDPs
- International reporting guidelines, such as the GRI.

Simultaneously, companies have to think in-house, local, national and global in planning for the sustainable development of their communities. This requires a great deal of intellectual sophistication, political commitment, and organizational flexibility. However, there are some precedents now of mining companies compiling Social Plans. It would be a valuable exercise, in future, to compare such plans and derive appropriate and realistic guidelines and standards for such plans.

### 3.2 Challenges of Sustainable Development

Internationally, mines have received extremely bad press because of previous experiences of mine closures, environmental problems, and social dislocation. The negative long-term implications of mining for local economies have led to critical scrutiny of mines' operations – and even a real doubt whether mining is worth it. In sum, for mines to operate, they need to convince governments and international NGOs that they make a positive contribution to local development. This requires an overhaul of the *entire modus operandi and business philosophy* of mines. In a real sense, mining as an activity is on trial. (Given rapid socio-economic change in post-modern economies, mines are not the only institutions on trial. Institutions such as multi-national corporations, local governments, and public bureaucracies are all under scrutiny for their continued relevance. We live in an age where entire economic sectors or institutional types may rapidly become obsolete or unpopular). Without SD, mines may well find that they have difficulties in securing government permits to operate, or even if they do, that they have to cope with intractable conflicts and tensions with the local communities.

Essentially, a mine is not sustainable, because its natural resource is not renewable. In addition to this incontrovertible fact, mining has several negative consequences for local economies – consequences which have been collectively called the “Dutch disease” or the “resource curse thesis”.<sup>3</sup>

1. *The spending effect:* Part of the additional income generated by the mineral boom is spent on non-traded goods and services (education, health, welfare, construction), leading to excess demand (since imports are constrained), while local production of traded goods is less profitable and this encourages its relative contraction.
2. *The resource-movement effect:* Labour and capital are drawn from other sectors, because of higher demand in the mining sector.
3. *The currency appreciation effect:* The mining boom causes the local currency to strengthen, which hinders export development
4. *The technology substitution effect:* The cost of labour increases relative to capital (wages are bid up), leading to labour-substitution technologies
5. *The enclave effect:* Mineral booms tend to generate few direct externalities, and most investments are channeled into welfare, not manufacturing, creating an almost hermetically-sealed mining industry
6. *The dependency effect:* National and regional economies develop a dependence on mining revenues.

The extent of these impacts in South Africa (or different parts of the country) can, of course, be debated. But there is a *prima facie* onus on the mining industry to show how such possible effects can be neutralised and reversed. This is the challenge of “sustainable development” (SD): How can the various types of “capital” or “assets” generated by the mining investment be channeled into other sectors? How can mineral assets be transformed into human capital, skills, entrepreneurship, or infrastructure?

The issue of promoting SD may have been won in principle, but making it work is another matter altogether. Three issues remain unresolved:

1. What does Sustainable Development actually mean?
2. How can it be aligned across biophysical, social and governmental boundaries? How can partnerships be achieved with other agencies?
3. How does one understand – let alone promote – community empowerment?

The concept of “sustainable development” is notoriously slippery. The term “sustainable” is multi-dimensional, and can refer to social, biophysical and economic aspects of development. Increasingly, there are efforts to bring these elements into harmony (even though trade-offs between them may have to be made at times). For example, there is a growing recognition that developmental plans require local communities to have effective and meaningful participation;

that local or indigenous knowledge is important; and that the human element is central to the implementation of sustainable development.<sup>4</sup> Participative approaches are increasingly required in development programmes.

Consequently, different stakeholders use the term in different ways, and are often vague in defining exactly what they mean. The term “sustainable” is value-laden, and is subject to change over time. Activities we previously regarded as being sustainable may *become* unsustainable, either because of better biophysical information, changing social values or increased uncertainty in perception or fact. Priorities also change over time, and can vary between short-, medium- and long-term time frames.

In the context of mining, “sustainable” is usually taken to mean “maintainable”.<sup>5</sup> But different kinds of entities can be regarded as the core of the meaning:

1. Sustainability of *individual livelihoods or enterprises* (i.e. being able to continue in an activity without being artificially “propped up” by a donor or government agency)
2. Sustainability of *collective enterprises*, whether state or non-state, in terms of revenues and expenditures (i.e. inputs, outputs and impacts)
3. Sustainability of *entire communities and local economies*
4. Sustainability of the *environment*, for future generations.

This means that the scope for disagreement between mines and other stakeholders is fairly large. Whereas a mine may define its activities and interventions as “sustainable”, other actors may argue that it does not make a real contribution on this score. It would be helpful always to remember that there are many legitimate meanings, and that common ground on definitions should always be found before proceeding with planning and activities. Where a participation process begins with disagreement about the priority of key elements of sustainability, a lengthy process of engagement may be necessary to evolve a consensus.

The multiple dimensions of SD may also require trade-offs. It may not be possible to achieve all the dimensions of SD at the same time and in the same project, and more of one type of sustainability may have to be achieved at the cost of another. Such negotiations should be clarified during negotiations, to prevent disillusionment at a later stage.

The “slippery” nature of the term means that discussion and negotiation must be intrinsic to any collaborative development effort. Such discussion should not simply be seen as a prelude to “real action”, but as an intrinsic part of any collaboration at all. By means of discussion, all kinds of latent issues, problems, interests and resources will be identified, which will be indispensable for later planning and implementation efforts.

### 3.3 Sustainable Development and Sustainable Livelihoods

This paper is based on the notion of “sustainable livelihoods” (SL) and “livelihood assets”.<sup>6</sup> The advantage of an asset-based analysis is that it focuses on what people already have (although they often do not realize the potential of what they have), and it then enables us to ask what prevents people from using their assets to their full potential. This would then enable government or private development agencies to determine the most effective interventions to undertake.

Such “assets” can take the following forms:

1. *Natural assets*: Land, water, minerals, forests
2. *Infrastructural assets*: Roads, irrigation, electricity, buildings, “sunk capital”, vehicles
3. *Financial assets*: Wages, remittances, savings, pensions, loans
4. *Social assets*: Family systems, NGOs, businesses, traditional social systems, community organizations
5. *Personal assets*: Skills, education, experience, health, energy, innovativeness, entrepreneurship.

The “*sustainable livelihoods*” (SL) methodology is a well-known methodology throughout the world (and therefore ensures international comparability<sup>7</sup>). It is potentially a useful common developmental language to identify linkages between the developmental planning efforts of municipalities and those of mine management. Increasingly, it has gained political currency, and was used by President Thabo Mbeki in his 2005 State of the National Speech: “Success in the growth of our economy should be measured not merely in terms of the returns that accrue to investors or the job opportunities to those with skills. Rather, it should also manifest in the extent to which the marginalised in the wilderness of the Second Economy are included and are at least afforded sustainable livelihoods”.

The SL approach cuts across the public/private divide, as well as across several developmental sectors. In South Africa, the livelihoods approach is gradually entering the development discourse. It is currently employed extensively by NGOs, particularly working in rural contexts. There is a growing literature on how it can be used to research local situations, and how it can help to identify appropriate interventions.

SL has already been used in the promotion of community-based planning initiatives in several municipal IDPs. For example, in Mangaung Municipality (Bloemfontein), the SL approach was used at ward level, to identify neighbourhood assets and problems. These findings were then consolidated at municipal level, which served as a guideline for budgetary allocations.

There are several advantages to the SL approach:

- It focuses on people's *assets* as a starting-point, and therefore assists people to build on what they already have, instead of creating wish-lists of what they would like
- It starts with people's existing modes of making a living, which presumably already have a degree of sustainability
- It enables fine-tuning in terms of intervention by outsiders (whether government or private organisations), usually aimed at removing pertinent "blockages" (things preventing people from making the effective or maximum use of their assets)
- Because interventions can be fine-tuned, they may be more cost-effective, and one can achieve more actual impacts, or "more bang for one's buck".

The focus on "assets" means that an analysis of local social and economic realities needs to be conducted before launching into an intervention. What, exactly, *are* people's assets, and what blockages need to be dealt with?

Livelihoods analysis is very context-specific. Each locality or community has a different combination of diverse livelihood strategies, and these can change in a dynamic way. The SL approach enables a proper study to be made (with the local community's participation) *before* a mine established, at various stages during the mine's existence, at the stage when the mine is facing closure, and after closure is completed. This will enable stakeholders (such as the mines and local governments) to determine the most effective interventions – generally with the support of the local community, because it is based on their own analysis of their own situation. The SL approach may therefore be very useful in the compilation of mines' Social Plans.

The analysis process should be done in profoundly participatory ways. It is only when local residents identify their situation as containing assets, that they will be willing to invest effort in developing their livelihoods. To ensure such participation, typical SL methodologies may be employed, for example: (1) archival research to understand historical conditions, (2) household interviews, (3) stakeholder interviews, (4) group or focus discussions, and (5) transect walks (walking through a community accompanied by local residents, who explain what everything means and how it works). The last two methodologies are typical of "PRA" (Participatory Rural Appraisal) or RRA (Rapid Rural Appraisal) methodologies, which have been evolved to provide a grounded understanding of people's life circumstances and their perspectives on their situation. These methodologies can be supplemented by statistical and survey analysis, as well as policy and programme analysis.

The crucial question is therefore: What impact will mining developments have on people's livelihoods and assets? Will their livelihoods and assets be enhanced or undermined, and how can positive impacts be promoted and negative impacts be mitigated?

Mines create certain kinds of assets: Infrastructural assets related to the mining enterprise, housing for mine workers, wages, capital and savings, types of skills development for mining employees, and so forth. The more these "assets" are related exclusively to the mining enterprise, the less "transferable" they are to other sectors and economic activities. In such situations, local communities are inordinately dependent on the mining enterprise, and are very exposed to "bust" conditions when mines scale down or change their style of operations. The challenge for SD is: Can a mine, during its lifetime, create the types of assets which people can adapt and expand to create non-mining livelihoods? Can the massive capital injection which a mine typically involves, be utilised to the best effect, to promote diversification and sustainable economic multipliers?

The impacts of mining developments as well as community programmes on people's "asset-base" may be very complex. It is quite possible that some assets (or effective use thereof) may be improved, while other assets deteriorate. Infrastructure (e.g. new schools) may be improved, but this may cause social assets (e.g. traditional authorities) to lose their potency or effectiveness. Trying to determine whether the net effect is generally positive or negative is often open to debate. Households may sell land to the mine, and thereby generate more financial assets, but in the process reduce their natural assets (land and water), which may make them more vulnerable when the mine closes, and local residents need to turn to agriculture once again. A new mine operation may cause local land prices to escalate, leaving some residents much better off, and others much worse off. Furthermore, interventions may have second-order and even third-order knock-on impacts on people's assets and livelihoods. For example, an investment in roads may create



markets (and therefore financial capital) for existing agriculturalists, but in turn may increase social inequality, which undermines social networks (and therefore undermines social assets).

A good example of a livelihoods analysis of the impact of a mine is Jeffrey Bury's article "Livelihoods in transition: Transnational mining operations and local change in Cajamarca, Peru".<sup>8</sup> The analysis enabled Bury to examine the impact of developmental programmes initiated by the mine, including health and nutritional assistance, the construction of medical posts and schools, road construction, technical assistance, reforestation programmes, agricultural development, rural credit and the construction of potable water systems. The study found that the mine helped to improve access to infrastructure and human capital (skills and education), but undermined natural assets (particularly the quality of water) and social capital (social networks).

This paper examines some of the concerns expressed by municipalities (in their IDPs), and considers what the prospects are for these economic dimensions to be promoted by sensitive, innovative and proactive measures undertaken by mines. Finding ways of doing this remains a challenge. In the search for sustainable solutions, there are two key difficulties: *alignment* (creating partnerships between mines and non-mine institutions); and *the process of community participation and empowerment*.

### 3.3.1 Alignment and partnerships

Social, biophysical, economic and infrastructural issues are seldom spatially aligned, so that it is difficult to analyse them in a co-ordinated fashion, or to co-ordinate them in implementation. For example, spatial structure of the ownership of a mine may not coincide with the environmental footprint of a mine, or with the infrastructure which it requires to operate the mine. None of these may coincide with existing governmental jurisdictions.

"Sustainable development" can be relevant at a number of different levels, ranging from the individual or household to a village, a town, a municipality and a district. The GRI Guidelines acknowledge that even the term "local" can be subject to interpretation, and it requires reporting organizations to define the term and to describe the criteria used to identify sites where the local economic impact is of particular significance.<sup>9</sup>

One way around this dilemma is to focus on partnerships, based on core competencies<sup>10</sup>. In particular, tri-sector partnerships (between a mining company, the government, and civil society), can be constructed on the basis of what each one does best. For example, government may provide a regional planning framework and bulk infrastructure, local communities may supply labour and building materials, and NGOs can provide expertise and external auditing. South Africa has a rich and robust tradition of civil society engagement with both the public and private sectors, which creates enormous scope for tri-sector partnerships. Some of these options are elaborated in the final section of the paper.

In this report, priority will be given to the municipal level, whether at district or local level. This is consonant with the focus on municipal IDPs as a starting-point for analysis. This does not mean that smaller units of analysis are unimportant; indeed, individual people or small groups are ultimately the most important *raison d'être* of development. But the municipal level may have the most impacts, because of their geographic scale, their fiscal resources and the integrated activities which are concentrated at this level.

But partnerships are, intrinsically, a zone of unclear and unstable relationships. Several problems are likely to present themselves:

- *The definition of core competencies* is not always that obvious. Different agencies have multiple role definitions, their functions are sometimes unclear, and their sense of their rightful sphere may come into conflict. "Identifying the community's voice" may become one of the key challenges of a development process. In sum, clarifying core competencies may require extensive discussions.
- Parties may have a poor understanding of *what they offer one another*.
- Parties may be *unwilling to compromise*.
- The relationship may be poorly institutionalized *within the participating organizations*.
- Newcomers may be *poorly oriented* to the partnership.
- Participants may not share the same *culture* – whether in the sense of ethnic, rural/urban or organizational culture
- Participants may have *different capabilities or skills*, creating a potential for envy and suspicion.

Pearson<sup>11</sup> and Hamman<sup>12</sup> suggest several ways of dealing with the problem of alignment and partnerships:

- Seek problem-scale solutions: For each problem, a different scale will be appropriate, and the various dimensions of development can be aligned in a tailor-made fashion. The sustainability criteria and goals will arise from the definition of the problem, instead of being determined *a priori* in advance. This leaves much

more scope for constructive debate and consensus. It is particularly useful to divide a problem into components, each with objectives, activities and evaluation methods.

- Establish long-term processes involving all parties which have a legitimate interest: They will co-operate in different ways on different problems, as they crop up.
- Use the assistance of external, trusted facilitators, to help to find common ground.
- Jointly determine decision-making processes with other stakeholders.
- Establish a shared vision about desirable directions of development. In particular, compile measurement indicators in a participatory fashion.
- Show persistent dedication in involving local stakeholder representatives.
- Use all the tools for achieving consensus - deliberation, persuasion and negotiation.

### 3.3.2 Community participation and empowerment

“There is an ongoing debate about what community support means, and how and when it is achieved”.<sup>13</sup> The same point is made by Hamman: “Company-community relations are hence at the heart of sustainable development in mining, and this is where some of the key challenges for the future lie”.<sup>14</sup> In addition to the conflict potential of local role confusions, there is a danger that mining companies, over and above their already substantial financial and human resources, further – and often unintentionally - increase the power imbalance between themselves and local communities. This is particularly likely when companies seize the initiative and – intentionally or not – determine the developmental agenda.

This raises many fundamental issues about the values of a society. Firstly, who is to count as “the community”? This is a question of *identity or belonging*. What is particularly interesting about the Mineral and Petroleum Resources Development Act (2002) is the blurring of boundaries between in-house mining issues and external community issues. Section 1 of the Act defines “broad-based economic empowerment” as a “strategy, plan, principle, approach or act which is aimed at ... transforming such industries so as to assist in, provide for, initiate or facilitate ...: (vi) the socio-economic development of communities *immediately hosting, or affected by the supplying of labour* to the [mining] operations; and (vii) the socio-economic development of all historically disadvantaged South Africans from the proceeds or activities of such operations [*italics added*]”. This is certainly a definition of “communities” in the broadest possible sense. In fact, there are likely to be disagreements in practice about what constitutes a mine’s “community”- who should be included or excluded? Where should social boundaries be drawn?

But the conceptual problems go further, to include problems of *empowerment*. Who is empowered to take decisions? Who defers or cedes their rights, to achieve action? It has long been recognized that communities are not necessarily homogenous or harmonious entities, and there may well be important cleavages of interests within even the smallest of communities. What should one do when different authority figures are in conflict with one another?

Different societies (e.g. rural and urban) have different conceptions of what it is appropriate for the government, community leaders, private sector firms, and civil society organizations to do.<sup>15</sup> In the context of newly demarcated municipalities, which have drafted IDPs and are now hoping to implement them, it is possible that confusions and tensions may arise about the proper roles of various authorities, as well as the private sector.

Some of this conflict has to do with different perceptions of what counts as “development” – for example, should local traditional communities be encouraged to stay in their “pristine” state, or to become integrated into the modern economy? Different local spokesmen and institutions may well have different views on such matters. In a traditional community, for example, the young people may have a great interest in future mining employment, while the village elders may stand to lose their effective authority in the local community. What should be done when the elders prevent mine researchers or facilitators from speaking to anyone but themselves, as happened at the Wavecrest site in the Eastern Cape?<sup>16</sup> A mine may easily be drawn into local disagreements, which may stem from long-seated conflicts, or which are triggered by the arrival of the mine itself.

The challenge of sustainable development remains formidable – precisely because it presupposes consensual normative underpinnings. We are hoping for participatory processes and developments based on consensus and win-win solutions – at a time when local roles are unclear, local power-plays may be intractable, and local interests may diverge. The crux of CSR is where it impacts on fundamental business decisions regarding the future of a project. Ralph Hamman poses some difficult questions:<sup>17</sup>

- Can a mining company be expected to keep its own immediate business interests on hold and recognize statutory and human rights of local communities?
- Can a mining company be expected to provide resources to enable a community to come to an informed and inclusive stance on a proposed project, with the aid of independent facilitators?

- Can a mining company be expected to respect the stance taken by local communities, even if this means the abandonment or limitation of the project?
- What should be done if district and local authorities, and possibly the traditional leaders, and even local NGOs and CBOs, disagree about the basis on which the mine should proceed? Should the company choose which horse to back (presumably the one which is likely to promote company interests), and simply avoid the others?

These dilemmas are likely to be ever-present, and there are no instant solutions other than discussions with as many stakeholders as possible. Long-term relationships have to be built and maintained, which requires local juggling of interests. Interest-based negotiations are premised on finding creative solutions that respond to underlying interests, and these interests need to be identified and made explicit by the various parties – often with the assistance of facilitators. Looking for win-win solutions, or finding options which can promote the interests of several stakeholders simultaneously, are probably the only way to proceed. District and Local Municipalities’ IDP processes would be a good opportunity to start such discussions and to build relationships.

### 3.4 The importance of provincial government

It was stated earlier that mines do not have to achieve the sustainable development of communities *on their own*. They are well placed to partner with government agencies. Provincial governments are major spending agencies (the bulk of government fiscal allocation is at the provincial level, particularly in the health, education and welfare sectors). But they are also important planning agencies, and are required to compile Provincial Growth and Development Strategies (PGDS). A PGDS is, in effect, an Integrated Development Plan, at provincial level.

From the four provincial strategies which were reviewed for this paper, it appears that provincial governments have not reflected thoroughly on the role of mining in their provincial economies or their local communities. A great deal more thinking needs to be done, and it would be highly advisable for mining companies to initiate such a process with provincial governments. Particularly in those provinces (such as North West) where mining plays a conspicuously significant role in the economy, such a higher-order level of planning is imperative.

This may not be as easy as it seems. Provincial governments are complex institutions, often characterised by interdepartmental rivalries. Furthermore, provincial governments are simultaneously accountable to their own provincial Executive Councils, Provincial Legislatures, and national sectoral departments. Nevertheless, provincial governments operate at a very important and strategic level of decision-making, with significant budgetary and spatial authority. They would be powerful partners in the promotion of SD, and so it is worth spending time and effort to get to know provincial dynamics and development priorities.

The following table is not a complete and comprehensive reflection of the contents of the four provincial strategies. Key issues were selected, either because they were particularly emphasised within the plans, or because they have special significance for mining, or because they reflect interesting and novel thinking.

Province	Strategic goals and issues	Key initiatives and unique provincial proposals (in addition to normal government policies and programmes)
<b>Limpopo:</b> Mining Development Strategy (2004), page 19.	<ol style="list-style-type: none"> <li>1. Role clarification regarding mining administration</li> <li>2. Harnessing information and communication technology</li> <li>3. Mobilising financial and other resources</li> <li>4. Investment promotion</li> <li>5. BEE</li> <li>6. SMMEs</li> <li>7. Mineral beneficiation – linkages with the manufacturing strategy</li> <li>8. Mining has grown considerably in the last 10 years, and it is now the largest economic sector of the province (25% of the provincial economy). Limpopo needs to promote diversification from a resource-based economy to an</li> </ol>	<ol style="list-style-type: none"> <li>1. The European Union has provided a 34-million Euro grant to Limpopo, which includes an LED component.</li> <li>2. The province has adopted the “value chain cluster approach” to promote synergies with mining companies.</li> <li>3. Flemish donor funding for lifeskills training for the youth.</li> <li>4. Dilokong Development Corridor</li> <li>5. East-West Development Corridor Continuous improvement in ABET and school education</li> <li>6. Skills Development initiative of the Departments of Labour</li> <li>7. Informal settlement upgrade programme</li> <li>8. Youth Volunteer Service Corps Provincial Sport Academy Youth at Risk Programme.</li> </ol>

	innovation-based economy	
<b>Mpumalanga:</b> Provincial Growth and Development Strategy, 2004-2014 (compiled 2003)	<ol style="list-style-type: none"> <li>1. Mining is 2<sup>nd</sup>-largest sector (18%), after manufacturing (28%).</li> <li>2. Need to deal with the “brain drain” from Mpumalanga (no local university)</li> <li>3. Coal-fired power stations cause serious air pollution.</li> <li>4. There is insufficient road infrastructure, particularly in rural areas.</li> <li>5. Severe HIV-AIDS related challenges – service delivery and orphans.</li> <li>6. Need better protection of endemic and sensitive environmental areas.</li> </ol>	<ol style="list-style-type: none"> <li>1. Maputo Corridor (SDI)</li> <li>1. Six major industrial clusters: Stainless steel, wood products, agri-processing, chemical products, agri-products and tourism.</li> </ol>
<b>North West</b> 2014: Executive Summary	<ol style="list-style-type: none"> <li>1. Dramatic increase in number of orphans.</li> <li>2. Need air quality monitoring in Rustenburg area.</li> <li>3. Need greater degree of environmental protection, of wetlands and other sensitive areas.</li> <li>4. General theme: “Breaking the shackles of poverty”</li> <li>5. Need better land and agricultural management, and soil and water conservation.</li> <li>6. Need strict application of environmental regulations for rehabilitation of mining areas.</li> </ol>	<ol style="list-style-type: none"> <li>1. Extension of LandCare programmes throughout the province.</li> <li>2. Reduce number of small unsustainable settlements and consolidate regional centres.</li> <li>3. Formation of strategic partnerships between public and private sector.</li> <li>4. Establishment of NW Investment and Development Agency, District Development Agencies and Municipal Development Agencies.</li> <li>5. Incubator networks to promote local enterprises.</li> <li>6. Public-private sector one-stop shop to give advice.</li> </ol>
<b>Free State</b> Growth and Dev Strategy, 2005-2014	<ol style="list-style-type: none"> <li>1. High proportion of AIDS-related deaths. High TB rate.</li> <li>2. Decline in relative contribution of mining sector to provincial output.</li> <li>3. Steady increase in unemployment.</li> </ol>	<ol style="list-style-type: none"> <li>1. Strong focus on SMME development and local business support.</li> <li>2. Strong focus on diversification, including jewellery.</li> <li>3. Focus on small-scale mining.</li> <li>4. Focus on science, engineering, technology, R&amp;D, and innovation (FS has two universities).</li> <li>5. Small towns investment fund.</li> </ol>

Even at a glance, these problems and proposals raise important potential issues for mining companies. The repeated focus on SMME development, diversification of economies, coping with HIV/AIDS, and the development of spatial corridors are fruitful topics for future discussion. Clearly, provincial governments need a structured process of reflecting on the contributions which mines can make to their provincial economies and social systems. This should be done in partnership with major mining companies in those provinces, since their investment decisions can have massive impacts on local economies and spatial trends.

But it should be noted that, in none of the four provincial strategies under review, was mining addressed as a significant *developmental* issue or partner – even though the importance of mining as a proportion of provincial GDP was recognised. Most suggestions are *ad hoc* in nature. Clearly, the issue of mining impacts on sustainable development has not been addressed adequately at provincial level. The most important reason for this lacuna is because mining falls under a national-level department (DME), without a corresponding provincial department. In this matter, it differs dramatically from sectors such as Agriculture and Industry (which have provincial counterparts), or Labour and Land Affairs (which have strong provincial branch offices). The lack of provincial focus on mining issues should be taken up by the Chamber of Mines, in discussions with the DME as well as provincial governments. Mineral issues should be brought into the ambit of provincial thinking – possibly under the auspices of Provincial Departments of Economic Affairs.

### 3.5 The importance of local government

Internationally, municipalities are becoming recognized as a crucial level of government in the process of enhancing development. There are several reasons for this new interest in decentralization of functions to municipalities, in South Africa as well as elsewhere:

1. In South Africa, municipalities are constitutionally recognized as the key front-end development agencies of the state. Not only are they recognized as a “sphere” of government, indicating proximate equal status to provincial and national government, but they are also likely to receive many more developmental functions in future. Furthermore, a growing share of the national fiscus is allocated to municipalities (the so-called “equitable share” of government revenue).
2. As development agencies, municipalities have important advantages. They are concerned with a wide range of developmental functions, and therefore transcend the usual “sectoral” or “silo” structure of government departments. Furthermore, they have a democratic base, due to the fact that they are elected bodies (including ward and PR representation), as well as structures such as ward committees.
3. As developmental agencies, municipalities have various advantages over civil society organizations. They can pass by-laws, raise revenue, receive government subsidies and grants, undertake spatial planning, and provide bulk infrastructure. This does not mean that civil society organizations are unimportant; but it does mean that municipalities are an important potential gateway to co-ordinated development in a region.
4. The new focus on drafting Integrated Development Plans, which has been bolstered by several years of technical and financial support by the Department of Provincial and Local Government, offers the first real opportunity for integrated development programmes in most municipalities. The IDPs play an important role in “integration”, whether in the sense of *spatial* integration (e.g. rural and urban areas, wealthy and poor areas), *racial integration*, *functional* integration (e.g. health, water, sanitation, LED and transport), or *economic* integration (e.g. mining, agriculture, commerce, tourism). In fact, for the first time in South Africa’s history, is there an opportunity to reflect holistically on a number of developmental problems and priorities simultaneously. IDPs are required to be reviewed on an annual basis, and in future, government spending priorities will have to be aligned to IDPs.

For these reasons, it is imperative that the mining sector takes cognizance of the IDPs that have been drafted. Where the mines have not yet participated effectively in the IDP-drafting process (and there may be a whole host of reasons for this, elaborated on below), this should be remedied in future.

At a higher level, discussions should take place between municipalities, SALGA, DPLG, the mining industry, traditional leaders, and labour unions. A similar process took place in Canada in 1994 (the “Whitehorse Initiative”). It lasted for 2 years, and culminated in a Leadership Council Accord, which included a wide variety of mining-related development issues.<sup>18</sup> The Accord adopted a strategic vision of a healthy mining industry in the context of maintaining health and diverse ecosystems in Canada, and for sharing opportunities for traditional communities. The really important aspect of the Accord was that it was underpinned by political and community consensus; and where consensus was not achieved (as in some environmental issues), this identified the need for future research and discussion to bring various sides closer together.

While the report uses IDPs as the starting-point of analysis, this should not blind us to the many difficulties faced by municipalities, and often reflected in IDPs:

- It has become almost axiomatic that many South African municipalities have “inadequate capacity”, in the sense that they are faced with real problems as regards the number of staff, inadequate revenue, inappropriate organizational structures, inadequate skills, and problematic political dynamics. This creates complexities for CSR partnerships. Where state institutions are weak, private institutions face dilemmas of whether to proceed on their own, or to wait for government institutions to be ready. Such decisions have to be made on a case-by-case basis, with due regard to likely consequences and future options.
- While some IDPs have become excellent guides to development, many other IDPs are still poorly drafted. Relatively few IDPs, as yet, have a meaningful focus on economic development. However, it should be noted that the quality of IDPs appears to be improving steadily.
- The public participation processes underpinning many IDPs have been woefully inadequate. Many key local constituencies (such as commerce and mining) have not been included in the debates leading to the drafting of IDPs. This may have been due to the reluctance of these constituencies to participate, or because they were never invited to meetings. Many IDPs are biased in favour of lobby groups representing the poor, in particular



black township residents, but they are often biased against rural constituencies (such as farmers or farm workers). Furthermore, many municipal Councillors still harbour a distrust of the private sector, and this leads to a systematic bias in Council decisions.

But despite these *caveats*, the IDPs still fulfill a major role in bringing together (often for the first time) a wide range of developmental issues, priorities, stakeholders and programmes. We argue, therefore, that IDPs are an important platform on which to build – and there is, of course, the self-fulfilling prophecy that the more the IDPs are taken seriously by key developmental players (such as mines), the more robust the IDPs will progressively become.

For the mining sector, the focus on IDPs also has a major advantage that it addresses developmental issues *not* from the point of the mining sector itself, but from the point of view of the surrounding communities and the government authorities. This, in itself, is a valuable way of understanding how the mining sector is perceived and experienced by the larger society, and therefore how the mines can target their social interventions most effectively. On occasion, it is useful and salutary to step outside one's own frame of reference, and view the situation from other vantage points. This may well bring to view new and latent economic strengths, assets and positive spin-offs.

In addition, IDPs are increasingly regarded by government as a binding document on *national and provincial departments* as well, and not only on the municipalities themselves. Government is placing increasing pressure on national and provincial governments to co-operate with municipalities in the drafting of IDPs, and there is a clear intention that public expenditures will only be authorized in future if such expenditures are provided for in the IDPs. This is being done to harness the “silo” behaviour of national and provincial departments, and to force them to co-operate with municipalities – and with each other – so that government programmes can be meaningfully co-ordinated. Section 24 of the Municipal Systems Act of 2002 lays the groundwork for this style of inter-governmental relations: “If municipalities are required to comply with planning requirements in terms of national or provincial legislation, the responsible organs of state must ... (a) align the implementation of that legislation with the provisions of this Chapter; and (b) ... consult with the affected municipality.” For mining companies, the implication is that, if it seeks partnerships with national or provincial departments on particular programmes or projects, then such programmes must also be negotiated with the relevant municipality, and it should be included in the IDP.

For several reasons, IDPs are of interest as a type of intellectual interpretation of the local *status quo* as well as a conceptualization of developmental opportunities and options. Firstly, they do involve some public participation (of varying degrees in different municipalities), and therefore are probably the most accurate contemporary record of how local leaders and local residents view mining issues. Secondly, they are typically influenced by development planners (who act as consultants to municipalities), and therefore they bring on board some of the latest trends in spatial planning and development thinking. Neither of these aspects of IDPs should be taken as “scientific truths” or “indubitable propositions”, and some of the proposals may have to be taken with a pinch of salt. But they can serve as valuable benchmarks of popular opinion, and possible points of contact between the mines and their social environments.

Another interesting aspect to the IDP exercise is that some Local and District Municipalities' IDPs remain unco-ordinated, despite strenuous efforts by DPLG and provincial governments to get LMs and DMs to co-ordinate their planning processes. In some cases, this suggests actual conflicts or disagreements amongst district and local government; in other cases, it is due to the appointment of consultants with different planning approaches. There remains substantial confusion about the appropriate roles of district and local governments with regards to various development functions, and this may well bedevil mines' attempts to engage meaningfully with the municipal sphere.

Another challenge is the capacity problems of many municipalities. This is not unusual in remote and underdeveloped contexts. How, in such circumstances, can a mining company secure the support of the state for partnership arrangements? Ralph Hamman and Paul Kapelus refer to the need for mining companies to learn to “lead from behind”, providing resources and building capacity for the state to play an active managerial role, and not being over-anxious to take credit for this [19].

A final difficulty is that IDPs are simply plans, and plans do not always get implemented. As the Canadian Whitehorse Initiative illustrated, collaborative thinking and discussions may be very stimulating, but do not always have a real impact on practice. Just as the Whitehorse agreement has been criticized for simply being public relations rhetoric, without improving mining companies' performance<sup>20</sup>, so many IDPs are likely to remain a dead letter unless stakeholders are committed and capable of implementing them.

IDPs therefore offer valuable, but not perfect, opportunities for consultation and partnership. In general, it can be argued that those mines which take IDPs most seriously will gain the most influence and impact for their developmental activities. The final section will make more detailed proposals on how mines can engage with the IDP process, and assist municipalities to build capacity.

### 3.6 The changing nature of mining

There are some aspects of the mining sector which may have new and unexpected impacts on local communities. It is likely that local stakeholders' understanding of the mining sector reflects past experiences, and that they have not been introduced to the latest trends in this sector. This may complicate local negotiations.

Paradoxically, mining still suffers from the image it enjoyed in the early 20<sup>th</sup> Century, even though the reality has changed dramatically. Until the 1950s, mines tended to develop deposits which were massive in relation to global production at that time, which could generate high profits. This was the case, for example, with the Kimberley diamond mines, the gold mines on the Witwatersrand and the Free State Goldfields, and the copper mines on the Zambian copperbelt. James Campbell<sup>21</sup> has argued that this is, typically, no longer the case – with the possible exception of platinum and diamonds. Worldwide geological exploration has meant that the likelihood of discovering a single deposit that could dominate global output is most unlikely. Furthermore, the growing separation of exploration companies and mining companies means that, even when an exceptional discovery is made, much of the potential additional margin is bid away by rivals competing for the right to develop the deposit.

Declining commodity prices has meant that production costs have to be kept low. Consequently, the scope for absorbing large non-mining costs, such as massive infrastructure development or the creation of complete mining towns, is no longer possible. Mines can no longer afford to be the sole financiers of large-scale national infrastructure in whose wake other industries could follow. For local communities, this means that their relationship with mines is likely to change dramatically. “The focus is now on replacing historical patterns of dependency, in which communities look to mining companies as providers of all needs, with long-term relationships informed by the principles of *sustainable development* and mutual interest”.<sup>22</sup>

It is critically important that these factors are discussed and incorporated into municipal IDPs. The growing emphasis on compiling mining Social Plans offers a valuable opportunity for the implications of longer-term mining developments to be aligned with municipal and governmental initiatives.

## 4 THEMES ARISING FROM THE IDPS

In this section, 27 municipal IDPs are reviewed for their proposals regarding mining-related developments. For each issue area, some government programmes are suggested, which can serve as potential bases for partnerships.

In terms of the SL approach, it is important to emphasise that these themes enable the transformation and enhancement of people's “assets”, for example:

- Social programmes (health, education, recreation etc) enable people to build their personal skills and health levels (or to prevent them being eroded by diseases)
- Housing and settlement programmes enable people to build houses, trading infrastructure, and roads
- Entrepreneurial programmes (artisanal mining, small traders) assist people to build financial capital, skills, and networks
- The involvement of traditional communities, CBOs and NGOs enable the enhancement of social capital
- When planning for mine closure, it enables government and other agencies to bolster people's existing assets and identify gaps, so that people can survive the economic crisis.

Six key themes were found in the IDPs. It should be noted that the coverage of mining in many IDPs is conspicuously sparse, with little understanding of the many economic and spatial implications of the mining industry. Nevertheless, there appears to be a growing awareness of some of the actual and potential impacts of mines.

Because this paper highlights the challenges of partnerships, the municipal IDPs are compared to national and provincial programmes, as well as to the performance of some of the large mines. This comparison is still at a very superficial level, and a great deal more investigation will be needed to understand the actual programmes within a certain locality, as well as the potential for partnerships.

### 4.1 Social services: Education, health, welfare and recreation

Mining companies in South Africa have extensive social programmes, including support for HIV/AIDS care centres, orphanages, schools, clinics, youth programmes and other philanthropic organizations.

It appears that those mines, who do offer community services, do this in a spirit of broad-based philanthropy and Corporate Social Responsibility. It is possible that these kinds of projects are very suitable for charitable giving,

because they are concretely visible, have an immediate impact on people, and are within ordinary people's lived experience. Most unsolicited requests for assistance by mines are likely to be in this category.

In contrast, it is remarkable how few municipal IDPs raised the possibility of mining involvement in providing social services:

- Of the 27 IDPs in the survey, only two had coherent proposals for involving mines in the delivery of *health* services – despite the fact that almost all mines have in-house HIV/AIDS programmes, and many mines donate resources to local clinics.
- None of the IDPs proposed the involvement of mines in *education or social facilities*, even though mines are particularly innovative in offering educational programmes. Only one municipality drew attention to the need for another school, to cater for the children of mining employees.
- Two municipalities are eager to share the *recreational facilities* with which the mining communities are richly endowed. None of the four company reports mention the provision of recreation facilities, or the sharing of existing ones.

More detail about the sample of IDPs and company reports is provided in Appendix B.

There is enormous scope for co-operation between mines, municipalities and national or provincial government programmes. Until now, mines have either taken the initiative to sponsor new social organizations, or they have contributed funding to existing organizations. There is much less evidence of joint planning with municipalities or government departments. Nevertheless, there are potentially far-reaching ways in which mines, municipalities and government programmes can be co-ordinated to provide mutual support. If such partnerships can be established, then mines will be able to add value and promote the sustainability of other government initiatives.

The following are existing government programmes (this not an exhaustive list), which may provide mutual benefits to mines and the broader communities.

#### **4.1.1 Department of Health**

The role of municipalities vis-à-vis provincial Health Departments remains somewhat ambiguous. A degree of decentralization of health functions has always been prevalent, but provincial departments are now attempting to extend their own delivery role through the creation of District Health Systems. Municipalities seem to have little more than an advisory role at that level. Environmental health remains a municipal function.

Nevertheless, municipalities remain important, because health planning is closely related to other municipal issues, such as population development, spatial planning and the provision of water and electricity. Currently, many municipalities still run clinics on an agency basis for provincial Health Departments, although the staff are paid by means of a provincial subsidy.

The focus of most of government health programmes remains the Primary Health Care system, which offers some level of free medical services to the poor. The most important health-related government programmes are:

1. *HIV/AIDS*, including roll-out of ARVs (still on a trial basis in some areas) and educational campaigns. This is currently supported by a home-based care programme, where community members work on a volunteer basis to assist people and families with their treatment.
2. *Infectious diseases*, such as TB, sexually transmitted diseases, and malaria
3. *Medical services to mothers and under-fives*.

Many government clinics are notoriously short-staffed and under-funded, resulting in shortages of medicines.

Clearly, government health programmes have many positive implications for the employees of the mines. In particular, given the prevalence of HIV/AIDS, the scope for partnerships between mines, municipalities and departmental clinics is great.

#### **4.1.2 Department of Social Development**

The most important programme in this department is the Social Grants Programme, which distributes old-age pensions, disability grants, and child-care grants to indigent and poor people. The Department of Social Development has also been responsible for Poverty Alleviation Projects, some of which have not lived up to expectations.

Some municipalities have their own social workers, and there is some suggestion in the White Paper for Social Welfare (1997) that social welfare services should be decentralized to municipalities. Nevertheless, though there has been no coherent attempt to devolve welfare services to municipalities, the consequences of severe social problems (such as HIV/AIDS, growing levels of unemployment, rapid urbanization and widespread poverty) are felt at local level. Most provincial Departments of Social Development are totally understaffed to meet local welfare crises.

For the HIV/AIDS programme, the Home-based Care Workers are meant to provide social services as well as medical support. However, because they are located within the Departments of Health (the local clinics), their priority tends to be on medical support, rather than social services. This leaves a severe vacuum in social services. The shortage of professional social workers, particularly in the rural areas, means that many households have little effective support in coping with social trauma.

Some municipalities have already adopted their own HIV/AIDS strategies, with different degrees of practical effect. Many local communities are being overwhelmed by the number of sick people and orphans. Poverty strategies must be “calibrated: at local level to meet the special needs of households and communities devastated by HIV/AIDS, improving their access to essential social services, income generation and employment programmes, and interventions to alleviate hunger and extreme deprivation. In this context, the mines can make a major difference to local communities. Linking up with the Home-based Care Workers, and supporting (or providing) professional social workers, may be the first place to start.

#### **4.1.3 Department of Education**

In addition to the normal educational functions of providing schools, teachers and learning materials, the Department of Education also provides Adult Basic Education and Training (ABET) and Further Education and Training (FET). FET colleges are technical skills colleges, which do not necessarily require a matriculation certificate for admission.

The FET system is now closely associated with the SETA system (Sectoral Education and Training Authorities), in an attempt to standardize qualifications and enable students to achieve qualifications in a modular way.

#### **4.1.4 Department of Safety and Security**

Policing is increasingly conducted at the local level, and there is an increasing demand for local accountability. Possible support for local policing could include the following:

1. Support for municipal police forces, where they are being established (Ekurhuleni, for example)
2. Support for community-based policing (e.g. police forums)
3. Crime prevention, e.g. support for youth educational and recreational activities.

Some mines have already provided financial support to police stations. This seems a useful intervention, and the promotion of Community Policing Forums would also be a constructive Endeavour.

#### **4.1.5 Department of Science, Technology, Arts and Culture**

Government policy emphasizes increasing public participation in arts, culture, heritage and literature, and promoting the developmental and economic potential of these activities. Local governments are involved in Legacy Projects and the promotion of the Cultural Industries Growth Strategy.<sup>23</sup> Community arts centres are being decentralized to municipal level, and municipalities are expected to promote tourism by means of promoting “heritage” features (such as museums, monuments, conservation parks, and cultural festivals). Very few municipalities can generate their own funding to promote these projects. In particular, the Culture Promotion Act (Act 35 of 1998) envisages that arts and crafts centres will promote local tourism, but municipalities currently have far too little funding to promote this goal. Special funding has been made available from the Poverty Relief Programme, to promote skills development in order to create jobs, but many of these projects still need to prove themselves to be sustainable. The Department of Science and Technology envisages strong partnerships with municipalities, and to entrench technological issues in IDPs.<sup>24</sup> There is a vast need for local support, to promote longer-term funding as well as skills development.

#### **4.1.6 Department of Sport and Recreation**

Municipalities are responsible for local sports facilities, and there are various programmes to promote sport and recreation in local communities:

1. Some municipalities have received capital grants (the “Building for Sport and Recreation Programme”, or BSRP) from provincial Departments of Sport and Recreation to build new infrastructure. However, such grants have been few and far between, and some municipalities do not have the operating capital or the skills to manage such facilities once they are constructed. The BSRP also intends to promote the creation of sustainable employment and SMME opportunities associated with sport and recreation, and the extension of sports training.
2. The South African Sports Commission has a “Mass Participation” programme, to promote the development of recreation and leadership in sport.
3. Community Sports Councils are to be created in communities where BSRP grants are allocated.
4. The SA Police Services have launched the Young Champions Programme in high-crime areas, to encourage young people to participate in “wholesome sport and recreation activities”, and to build social cohesion in communities with social problems.

There is significant scope for mines to become involved, as a partner with municipalities, to provide and/or manage sports facilities. In those areas where mines are scaling down, mines can make their own sports facilities available to municipalities.

#### **4.1.7 Multi-purpose Community Centres (MPCCs)**

These Centres, promoted by the South African Communication Service, aim to co-ordinate government services in a one-stop, user-friendly way. The more MPCCs are established, the more citizens can have direct and convenient access to government services (such as pension pay-outs, policing, justice, and home affairs services).

Funding from mines can enable the government to provide more MPCCs.

## **4.2 Housing, infrastructure and spatial planning**

The sample of municipal IDPs shows a strong interest in settlement issues, which are related to mining activities. These include:

- Providing formal housing settlements for informal (illegal) shack areas, populated by people who are drawn into the area by increasing mining activities.
- The need to build more houses in existing towns and suburbs, to accommodate mining employees. Municipalities seem to be concerned that they should not shoulder the full responsibility for settlement issues, which are caused by mining operations.
- Promotion of family housing, instead of hostels.
- The impact of mines on spatial planning, particularly those areas “sanitized” by extensive mining operations. This creates difficulties in consolidating and densifying land uses. Themes such as corridor development, mixed land uses, and the creation of economic nodes, feature in the IDPs.
- Mining land use should be dovetailed with other economic sectors, particularly agriculture and tourism. In particular, mining cuts across nature conservation tourism.
- The provision of household infrastructure is a concern for some municipalities, particularly in informal communities. In some cases, mining infrastructure was previously used, but it had been sold off.
- The provision of bulk infrastructure (particularly water, electricity, and roads) to mining operations was mentioned as a cause for concern.

The IDPs’ strong focus on spatial issues may be a result of the fact that many IDP consultants are drawn from spatial and regional planning professions. This may create some disciplinary bias in the compilation of IDPs. But this is not a bad thing, since IDPs are precisely meant to *integrate* land uses and spatial areas in a meaningful way.

In contrast, only two of the four company reports mentioned housing projects and infrastructure. The emphasis appears to be on specific and rather *ad hoc* projects, rather than on spatial planning issues. Some interesting features are:

- A case of a settlement relocation
- An upgrade of hostels into household accommodation (which is an in-house mining issue, but with future implications for urban residential development)
- The creation of a local Housing Company, which is an investment in institutional capacity.

Some municipalities (e.g. Bojanala Platinum DM and Thabazimbi LM) had already established relationships with local mines to discuss settlement issues at a level which transcends *ad hoc* projects, and which includes spatial planning. This trend may be more prevalent than is reflected here. More details about municipal IDPs and company reports are provided in Appendix B.



Housing and spatial planning form an important aspect of government social policy, and the provision of housing subsidies has been undertaken since 1997, in terms of the Housing Act (Act 107 of 1997). As it stands now, housing provision is a provincial function (not a municipal one), although the laws makes provision for municipalities to be “accredited” as a housing provider. Almost no municipalities have applied for accreditation status, because insufficient government funding is available to support this role. The only role currently performed by municipalities is to select beneficiaries, apply to provincial departments for subsidy funding, and then manage the construction process (often by means of contractors).

One policy innovation may create opportunities for mines to become involved in housing delivery. This is the “People’s Housing Process” (PHP), which enables people to build their own homes by means of government technical assistance and provision of materials. The PHP has several advantages over contractor-built housing: People have a greater sense of choice, and ownership, and build valuable technical skills during the process of construction.

Housing is not only about houses. It is also about settlement planning. Increasingly, provincial governments have to address the question whether remote rural communities are sustainable, or whether economic investment and housing provision need to be “consolidated” into more centralised rural growth points. In Limpopo, the provincial government is particularly innovative about corridor planning. Limpopo has adopted the “value chain cluster approach” to promote synergies with mining companies:

- Dilokong Corridor between Pholokwane and Burgersfort (Sekhukhune District) and Makopane (Waterberg District). This is based on the Pholokwane Smelter, the new platinum mines, the chrome mines, and their associated industries (local suppliers for mine materials and supplies, and shopping needs of employees). Public sector investments include the road between Pholokwane and Burgersfort, water source development, and skills training.
- Coal mining and manufacturing cluster at Ellisras on the East-West Corridor (Waterberg District). This includes proposals to expand the Grootgeluk Coal Mine and the power station, and to build an aromatics extraction factory. The factory will be fed with chemical-grade coal from Grootgeluk. Downstream products will include Styrofoam, plastic, nylon and rubber products.

Such spatial interventions need to be clarified before mining companies invest in on-site or off-site housing projects.

### **4.3 Promotion of small-scale mining activities**

The promotion of small-scale mining as part of LED may be desirable. There are potential situations where small miners may earn more than a basic survival livelihood (for example, the Dinokana/Zeerust slate project).<sup>25</sup> But the factors constraining small-scale or artisanal mining are well known:<sup>26</sup>

- Poor access to mineral rights
- Poor access to finance
- Primitive technical methods
- Location of operations far from major markets
- Lack of management, marketing and technical skills
- Poor environmental, health and safety practices
- Very few linkages or networks amongst small mining organizations
- Confusion regarding their legal status.

Despite widespread interest by municipalities in the promotion of small-scale or artisanal mining, none of the mining reports recorded any activities in this field.

In contrast, 10 IDPs in the sample express the desire and goal to promote small-scale mining. One gets a sense of municipalities which are casting about for any kind of income-generating activity that they can promote within their jurisdictions. More detailed information from the sample is provided in Appendix B.

Small-scale mining is practiced widely in South Africa, and it is estimated that more than 30 000 miners are involved in this sector. It is usually defined as operations of individuals or small groups of individuals, which are entirely financed by existing resources, and are based on simple traditional techniques and tools, with low mechanisation levels. Subsistence mines are referred to as “artisanal mining”, while “junior mines” have evolved past the level of subsistence, and have some form of legal status.

The South African Government has a stated intention to encourage small-scale mining to provide employment. In the White Paper on Minerals and Mining, the Government suggests that small-scale mines have the potential to produce where large-scale mining is unable to operate profitably.<sup>27</sup> In terms of the 1998 White Paper on Minerals and Mining, Government also wishes to create an enabling environment for municipalities to maximize the positive role that the mineral sector can play in local LED, particularly as identified by local IDPs.

DME has a National Steering Committee (NSC) of the Service Providers to the Small Scale Mining Sector. This committee aims at legalizing small-scale mining by assisting in the upgrading of these operations into economically viable business units. The NSC is focusing on identifying small-scale mining operations in recognized poverty nodes, to enhance economic development. (However, the NSC does not yet include municipalities). Furthermore, training institutions have been established to train small-scale miners in practical mining methods (examples are Zenzele Technical Demonstration Centre, and Mintek at CSIR). The DME also has a Fund called the Bakubung Initiative, to support junior companies; and the Industrial Development Corporation (IDC) has decided to commit investment funding for this Initiative.

The DME assists small scale miners in several ways:

- Establishment of legal entities
- Identification of mineral deposits
- Environmental Impact Assessments
- Legal and contractual arrangements
- Reserve estimation of the selected deposits
- Mining feasibility studies
- Market studies
- Development of mining equipment
- Setting up pilot production projects.

The DME acknowledges that, despite its efforts, small miners will benefit from the assistance of large mines. The lack of funds to improve methods and acquire appropriate equipment traps these miners in crude and inefficient mining and processing methods, thus perpetuating a subsistence livelihood for the miners and their families. The use of inadequate mining and processing techniques leads to very low productivity and low recovery of valuable minerals, which in turn results in low revenues and inability to accumulate funds for investment. Mining companies can also make a contribution with regards to training and project design.

A more systemic problem, in South Africa, is that there is an unclear institutional oversight of small-scale mining. It is still indisputably the responsibility of the Department of Minerals and Energy, but increasingly, municipalities have to cope with the environmental consequences of small mining. Municipalities are also responsible for LED and poverty alleviation programmes, which have obvious relevance for small miners. It appears that there is little co-operation between DME and municipalities at this stage.

Municipalities have to play a stronger role with regards to artisanal and small-scale mining. But it will require capacity which municipalities do not have. Furthermore, as it stands now, municipalities have now powers with regard to mining, such as authorization, monitoring or closure issues. For example, municipalities do not have authority to stop illegal or dangerous mining activities.

Building municipal capacity with regards to mining issues may well be the contribution which large-scale mines may be able to make. For example, municipalities need to devise environmental and safety regulations that are appropriate to the circumstances of small-scale mines. Such regulations which are devised at municipal level, may well be more appropriate and effective than DME's centralized regulations. Municipalities are also likely to react faster to local situations than need urgent attention. Furthermore, municipalities are more likely to identify and provide the supplementary services (such as roads, schools and clinics) which would serve artisanal miners.

Not only is it a question of promoting technical skills at municipal level, but also to promote co-ordination between municipalities and the DME. But for mines to assist municipalities with regards to small-scale mining, it would require large mines to overcome their negative perceptions of small-scale mines as unregulated, disorganized and responsible for considerable environmental damage. These perceptions may well be accurate, but to overcome these problems will require an increasingly effective municipal role.

#### **4.4 Promoting job creation, entrepreneurship, BEE and training within the mining sector**

This section considers the promotion of jobs and entrepreneurs *within the mining sector*; the next section considers issues of economic diversification.

The municipal IDPs reflected a variety of concerns: Attracting capital investment for new businesses; job creation; training; local sourcing; and assisting local entrepreneurs.

The mining company reports reflect significant interest in promoting emergent companies. South African companies are required to promote BEE, and are often eager to assist emergent companies, by means of affirmative procurement and outsourcing.

The difficulty with expectations to increase employment is that mines are currently dependent for their survival on *reducing* employment and on capital-intensive technologies. Smaller workforces are also associated with increasing tendencies towards outsourcing. Furthermore, mines may well need a large workforce during the initial stages of a project, but may have to reduce employment once production processes reach maturity.

The most important government department is the Department of Labour, which is responsible for the Skills Development Fund and the various Sectoral Education and Training Authorities (SETAs). The Mining Qualifications Authority (MQA) is promoting mining-related training. Many areas are experiencing shortages of training providers in the various sectors, and this is an issue where mining companies can make an important investment. Mines offer valuable opportunities for on-site training and mentorship, to complement formal training programmes. Mines are now responsible for compiling Workplace Skills Plans, and this is a valuable opportunity to identify new training needs as well as individuals' potential for additional training.

However, it should be realized that mines are likely to employ only a fraction of the number of employees that were employed in the past. A mining career is likely to become an option only for the select few. Despite possible local expectations, mass employment is probably a thing of the past, and mines should be very careful not to raise expectations about employment prospects.

#### **4.5 Economic diversification and beneficiation**

Economic diversification is linked to the promotion of small business and entrepreneurship (the more small businesses there are, the more diversified is the economy). But diversification goes beyond assistance to a few *ad hoc* beneficiaries. It suggests a more proactive and systematic attempt to build up new economic sectors. Beneficiation and diversification are important, particularly in the light of future mine closures.

Several municipal IDPs in the survey show a concern with the finite nature of mining, and the need for proactive diversification. In the survey, 13 IDPs included consideration of this issue. There is a widespread recognition that a municipality's eggs should not be placed in one economic basket.

The following are some government programmes which may provide possible opportunities for partnerships with mines. Government programmes can be divided into different sectors:

##### **4.5.1 Department of Trade and Industry**

The DTI is a federation of bodies rather than a single institution. Consequently, there are many different agencies and programmes which may be of relevance to local communities. Some of these agencies have identified municipalities as useful partners, whereas others tend to implement their programmes without the involvement of local government:

1. *Ntsika*: The most important agency is Ntsika Enterprise Promotion Agency, whose programmes include:
  - Local Business Service Centres (not all are functioning properly)
  - Tender Advice Centres
  - The Emerging Contractor Development Programme (linked to the national Department of Public Works)
  - Targeted Assistance Division (TAD), giving direct grants to SMME initiatives for marginalized groups (e.g. youth, women, disabled and rural communities).
2. DTI also runs the *Enterprise and Industry Development (EID) programme*, which focuses on skills development, sustainable SMME creation, implementing BEE, promoting women empowerment, an incubator programme, and support for industrial innovation. The EID's "Geographic Spread Programme" is aimed at extending business activity to under-served areas, in accordance with municipal IDPs.
3. The DTI also promotes *Spatial Development Initiatives (SDIs)* in specific development corridors, where business linkages can be promoted more effectively. Some mines may well occur in SDI areas, and this offers a valuable platform for co-operation with other businesses.

4. The DTI's *Enterprise Organisation (TEO)* promotes domestic and foreign fixed investment, economic growth, employment creation, SMME support and human capacity development. The TEO includes a "Critical Infrastructure Fund", a Skills Support Programme and a SMME Development Programme.
5. The *NAMAC Trust (National Management Advice Centre)* provides advice and assistance to SMMEs in partnership with the CSIR and Ntsika. It administers various programmes:
  - Manufacturing Advisory Centres (MACs)
  - the Business Referral and Information Network (BRAIN) Programme
  - the Franchise Advice and Information Network (FRAIN) Programme
  - The One-Stop SMME Support Centres.
6. DTI promotes *municipal twinning* of municipalities with foreign municipalities.

Municipalities are potentially very important, although many of them do not yet have the skills or resources to promote SMMEs. Municipalities can play a pro-active role in promoting the economy of an area, and they can provide key infrastructure and spatial planning. There are success stories, and some municipalities have created their own SMME support programmes or Local Business Support Centres.

The opportunities for mines to provide financial and technical support are therefore vast. This support can take the form of providing facilities (such as storage space or kiosks), or providing (or funding) mentorship.

#### **4.5.2 Local Economic Development**

LED is primarily the responsibility of the Department of Provincial and Local Government (DPLG), because LED is seen as primarily a municipal-led initiative. DPLG focuses on building the capacity of municipalities to promote LED, and LED projects can now be funded as part of the Municipal Infrastructure Grant (MIG). LED has not been effectively promoted in the past (it has been too centered on *ad hoc* and often unsustainable local projects), but there is a growing realization that municipalities need to promote a suitable investment climate for LED. But no common definition or approach towards LED has yet been developed, despite a great deal of diagnostic research of specific local case studies.

There is no "formula" for LED. It depends crucially on local innovation, initiative and leadership. If these ingredients are present – at both the municipality and the mine – then there is a great scope for LED interventions and partnerships.

#### **4.5.3 Department of Agriculture**

The fact that mining companies own large agricultural land parcels make them eminently suitable partners for agricultural programmes, even on a rental basis. Government programmes include the following:

- The *CASP Programme* (Comprehensive Agricultural Support Programme) is aimed at assisting the beneficiaries of land reform projects to become sustainable agricultural operations; and the Farmer Settlement Programme provides agricultural land for farmers through the disposal of state-owned land.
- The *Integrated Nutrition Programme* provides food for school children in poor communities.
- The *Landcare Programme* promotes partnerships with communities for sustainable management of natural resources.
- The *Food Security Programme* promotes food production in food deficit areas and generating rural employment, by means of low-cost irrigation systems, communal vegetable gardens and backyard gardens. It also aims at improving dry-land cultivation through appropriate soil and water conservation technologies and better land husbandry practices.
- The *Youth Farming Project* supports young emergent farmers.
- Promoting the creation of *farmer co-operatives* and support systems.

At this stage, municipalities have no official role with regards to agricultural support. However, municipalities increasingly have to venture into this field. Municipal functions such as spatial planning, water provision, urban agriculture, municipal commonage development, backyard food security programmes, SMME development and LED create a *prima facie* reason for municipalities to take a more active role in agriculture promotion. In the meantime, provincial Departments of Agriculture are severely under-funded and understaffed. Any support provided by mines in this regard would have enormous impacts on diversification of livelihoods in rural and semi-rural communities.

#### **4.5.4 Department of Land Affairs**

The political pressure for land reform, and the enormous land hunger in certain communities, provides an important opportunity for mines to become involved in land reform projects. The key government programmes are:

- *LRAD* (Land Reform for Agricultural Development) Programme, which is aimed at purchasing farm land and settling black farmers
- *Tenure reform*, by assisting traditional communities to modernize their land tenure arrangements
- *Extension of Security of Tenure Act* (1997), associated with the *Land Reform (Labour Tenants) Act* (1996), to assist farm workers and labour tenants to assert their legal rights to residence on commercial farm land
- *Land restitution*, to transfer land to people who had lost their land as a result of racial policies in the past.

These programmes have a key limitation: they are focused on the transfer of land or land rights, but make no provision for “after-care” of beneficiaries after they have received rights to land. For post-transfer support, the Department of Agriculture has to enter the picture, and hence its CASP Programme (see above) is of key significance). The difficulty is the lack of resources of both the Department of Land Affairs (and hence a slow pace of land transfers), and the Department of Agriculture (and hence inadequate post-transfer support). The identification of suitable land for land transfer, and the provision of “after-care”, remains the biggest obstacles in the land reform programme. Mines who wish to assist communities to diversify their livelihoods can make a major contribution in this regard.

#### **4.5.5 Poverty projects**

The Department of Social Development (DSD) makes grant funding available for groups of poor people to engage in livelihood activities. Many of these projects have been unsuccessful due to a lack of technical and business skills. This offers opportunities for mining companies to provide technical assistance.

#### **4.5.6 Tourism promotion**

Tourism is a complex industry requiring skills in advertising and marketing, business development, product development and management. The formal role of municipalities has not been specified by government, but by default, many municipalities are now becoming involved in some kind of tourism promotion. Tourism is regarded as an important dimension of LED and SMME development. Some municipal functions are quite basic (provision of signage, parking, maintaining transport access, land use planning and licensing food establishments), but a more dynamic role is also required (marketing and business development).

But municipal activities have often not been successful in practice, due to a lack of the right kind of skills at municipal level. Municipalities need to learn to identify local “assets” that can also realistically contribute to economic development. Various partnerships are possible, including with game farms (“eco-tourism”), B&Bs, and mines (old mining infrastructure). In particular, rural or under-resourced municipalities need assistance to build their capacity regarding tourism development.

The main government tourism programme is the creation of *poverty relief projects*, to assist poor people to enter the tourism trade (e.g. the production of crafts, the training of tour-guides, and the management of information offices). Some of these projects have been very shaky, due to insufficient management skills. Some provincial governments also have tourism promotion agencies, which assist municipalities and other tourism service providers. Once again, support for these agencies is often sorely needed.

#### **4.5.7 Expanded Community-based Public Works Programme**

This programme, co-ordinated by the national Department of Public Works, and implemented by provincial departments, is aimed at providing employment and skills training by means of infrastructure projects. Projects and needs are usually identified by municipalities.

This programme is particularly useful when municipalities (or mines) can identify new economic activities to complement mining activities. For example, mines may make available their land for emergent farmers, but this may require new access roads, which could be funded by the CBPWP.

### **4.6 Environmental management**

Many IDPs raise environmental concerns. These fall into the following categories:

- Rehabilitation



- Environmental management in mining operations
- Environmental planning
- Environmental health.

A particular difficulty is the clean-up of “orphaned” mine sites, where no responsible parties can be identified. This is an international phenomenon, as this international reference testifies: “There has yet to be a successful mine closure in Canada from an environmental perspective. Most mine communities live with a degraded ecosystem. Some face looming ecological disaster, and protracted legal proceedings and debates over who has responsibility for clean-up”.<sup>28</sup> One approach is to create an environmental fund, drawn from a combination of government revenues, taxes on industry, and taxes on the consumer, to pay for rehabilitation [<sup>29</sup>].

This report cannot deal with the many ramifications of environmental management regulations, standards, and practices. What is worth drawing attention to, however, is that there is a growing recognition that the public must be involved in defining reclamation and perpetual care requirements [<sup>30</sup>]. This includes determining priority sites and the extent of the clean-up. Monitoring systems should be devised in such a way that all stakeholders receive adequate information and feedback.

Municipalities are increasingly required to decide on their own environmental policies. Municipalities may take their own decisions on whether or not to permit mining in sensitive areas. There are national and international precedents for allowing and prohibiting mining development (the proposed St Lucia mine, which was prevented from being implemented, is a case in point). This creates a possibility of local diversity, which could become complicated. Some municipalities may be more assertive or knowledgeable than others; and some may have their own priorities of integrating environmental management with other developmental issues (e.g. promotion of SMMEs).

The company reports also show a major focus on environmental programmes and projects. Large mining companies have a great deal of environmental skills and experience. In fact, they may be the only repository of such knowledge within some municipalities (in particular, poor and rural municipalities). There is huge scope for co-operation between municipalities and mining companies in this regard.

Two government departments have particularly important roles vis-à-vis environmental management programmes at local level:

#### **4.6.1 The Department of Environmental Affairs and Tourism (DEAT)**

DEAT has introduced strict policies with regards to environmental management. The principles of the 1998 National Environmental Management Act (NEMA) are binding on municipalities. There is a major challenge that many municipalities do not have the skills or resources to live up to their environmental role, and it is here that mines could make a valuable contribution. Some of the DEAT policies open the way to co-operative activities with municipalities and local communities:

- DEAT has run a number of Local Agenda 21 pilot projects in various municipalities, and there is great scope for extending this programme to other municipalities
- Some metropolitan municipalities have developed State of Environment Reports, and this precedent can be extended to other municipalities
- In terms of NEMA, municipalities are required to compile Environmental Management Plans (EMPs) and Environmental Implementation Plans (EIPs)
- NEMA provides for environmental awareness training to be a municipal function
- Municipalities are well placed to promote community-based natural resource management (CBNRM) programmes, biodiversity projects, recycling projects, and environmentally-related poverty relief projects.
- Air pollution control is a major municipal function, and in terms of the new National Environmental Management Air Quality Bill, municipalities will have the power to issue licences to industries and businesses. They are also required to develop an air quality management plan, and to include this in the IDP, and have an air quality officer to co-ordinate these matters.
- Municipalities are responsible for waste management, and need to draft appropriate regulations.

#### **4.6.2 Environmental health: Municipalities and the Department of Health**

Environmental health functions (EH) are located at municipal (local or district) level. The current definition of EH include water quality monitoring, food control, waste management, appropriate sanitation, control of premises, prevention of communicable diseases, vector control, disposal of the dead, and chemical safety. Some of these

functions clearly impact on mines' activities. Increasingly, EH officers are expected to adopt a more "participatory" or "developmental" approach to their functions, which goes beyond the traditional "inspection" role.

Many municipalities no longer can afford EH officers; very few EH officers are being trained; and many municipalities do not have EH by-laws in place. Environmental health tasks are steadily increasing (for example, due to the growing tendency of township residents to keep livestock in residential areas), without corresponding human resources to deal with these problems. There are major opportunities for mines to assist municipalities, for example, by promoting waste recycling technologies and associated small businesses, or to design appropriate air pollution by-laws.

## **5 POTENTIAL NEW POLICY CHALLENGES**

In this section, two issues are considered which are not yet on the agenda of the municipalities or the mines. Both of these issues are fraught with potential controversy, and therefore it may be useful to launch pre-emptive research and discussions to minimize future conflict.

### **5.1 Traditional communities and land tenure**

The municipal IDPs in the survey did not specifically raise the issue of interaction between mines and traditional communities. Two mines mentioned policies in this regard: The need to recognize local customs and institutions, and the need to promote development in deep rural labour-sending areas.

There are three dimensions to this issue.

#### **5.1.1 The cultural/political dimension**

This involves interacting with traditional communities in such a way that traditional institutions are not undermined. In particular, the processes and procedures of negotiation and discussion are important. The involvement of mines in promoting local consultation and needs assessments is explored more fully below.

It should be noted that the process of consultation with traditional leaders may be controversial in specific settings. Some communities are already experiencing a process of individuation and modernization, and traditional leaders' authority may not be universally accepted.

The participatory methods associated with the SL approach are useful to analyse ordinary people's allegiances, and whether they would turn to traditional leaders or to other government agencies for developmental assistance.

#### **5.1.2 The developmental dimension**

This issue involves providing substantive economic development in traditional communities.

BEE firms and local traditional communities are increasingly seeking a more fundamental level of involvement in mining industry, in the form of equity participation, joint ventures, profit sharing and jobs which create marketable skills. It is quite possible that mines would be in favour of partnerships with black-owned firms.

Internationally, there are emerging principles for accommodating mining and traditional interests:

- Traditional communities are entitled to opportunities to participate fully in mineral development at all stages of mining and associated industries, at all employment levels.<sup>31</sup>
- Traditional communities should participate in terms of direct employment, as well as related economic or business opportunities
- Traditional communities should be encouraged and assisted to form their own development organizations in their efforts to raise their profile with the mineral industry, increase credibility, and attract investment for mineral development.<sup>32</sup> Municipalities can play an important role as facilitator in this regard.
- Traditional communities should also be assisted and funded to conduct baseline studies before and after mining exploration or development.
- Some mines agree with local communities to grant a specified sum of money for community development each year (for example, the Argyle Diamond Mine in Western Australia).
- Some mines have created Development Trusts, Charitable Trusts or Sustainable Trusts for local communities.

Methodologies to achieve these developmental goals still need to be found, and international precedents should be examined closely. At this stage, this issue is not yet on municipalities' radar screens, but with the passing of the Communal Land Rights Act (2004) (see below), which will entrench the powers of traditional leaders, it is likely to become prominent in future.

### 5.1.3 Land tenure issues

Land tenure claims of traditional communities can present difficult challenges to mines. In Canada, the erosion of the security of mineral title in some Canadian provinces has increased the level of risk and acted to discourage investment in mineral exploration and development.<sup>33</sup> This has shown the need for timely, consistent, dependable and simple rules and processes for resource development in claims-settlement areas, and in post-settlement mechanisms.<sup>34</sup> Traditional land claims should be settled expeditiously, efficiently, and fairly.

But there are basic procedures in South African law which attempt to structure interactions with traditional communities. These regulations are based on the Interim Protection of Land Rights Act (IPILRA), Act 31 of 1996. Regulations promulgated by the Department of Land Affairs (DLA) specify that communal land is still nominally owned by the state, with the Minister acting as Trustee. Issues such as township development, subdivision, the granting of servitudes, leases, mortgages and sales, need to be ratified by the Minister.

But DLA also intends promoting communal decision-making in these areas. In terms of the IPILRA regulations, any land-use decisions need to be debated and decided by community members – whether in a single community meeting, or in a series of meetings. Where it is the custom, the meetings should be called by the Traditional Authority. The majority of community members need to agree to changes in land use or land allocation. Particular attention must be paid to the impact of such changes on women. DLA officials will be sent to monitor the conduct of such meetings.

In future, the Community Land Rights Act (CLaRA), Act 11 of 2004, will come into operation. The Act has been promulgated, but has not been put into effect yet. The CLaRA makes provision for the transfer of land to communities or individuals, and for land rights enquiries and land planning. Such planning needs to be subject to municipal spatial development plans and IDPs. Municipalities are obliged to service communal land. In terms of CLaRA, community-based Land Administration Committees (LACs) are to be responsible for local land administration. In general, Traditional Councils are to be LACs, and they may take on responsibilities currently vesting in municipalities (such as land use management and LED). Traditional Councils may become service delivery agents of municipalities.

The CLaRA regulations will only apply to a community on *application* to the DLA; it is therefore a demand-driven mechanism. It should be noted that the role of Traditional Councils is not obligatory. It depends on communities' own preference. Communities may prefer to use other land-ownership mechanisms, such as individual title or the Communal Property Association Act. The main rationale of the Act is to *transfer* communal land to communities or individuals, which *may* be a Traditional Council entity, but need not be. Once the transfer is accomplished, the property will be registered at the Deeds Office.

CLaRA regulations are still being drafted, and will probably be piloted in KwaZulu-Natal, before other provinces are affected. Currently, therefore, the IPILRA interim regulations are still in force.

## 5.2 Local taxation

Only one municipal IDP mentioned this issue, and none of the mine company reports referred to it. Clearly, this is not yet a topic for public debate.

Yet there are growing signs that mining land will be brought more firmly into the municipal system. This is for several reasons:

1. The creation of “wall to wall local government” in 1995 means that all land falls within a municipal jurisdiction.
2. The incorporation of rural and urban areas into shared municipalities in 2000 means that rural and urban issues will henceforth be dealt with on a much more integrated basis, whether from an infrastructural, spatial, planning, or fiscal point of view.
3. Departments such as Water Affairs and Forestry (DWAF) have firmly asserted the role of municipalities as “Services Authorities”, which means that they have policy-making power over their whole jurisdiction – including private land. DWAF has already drafted guidelines for municipalities to liaise with private land-owners. Municipalities are not necessarily required to *provide* water services (water and sanitation)

to residents on private land, but they are legally required (in terms of the Water Services Act, Act 108 of 1997) to *ensure the provision* of such services. Land owners may become “water services intermediaries”, contracted by municipalities to undertake the actual provision of services to residents on private land.

4. Once municipalities take it upon themselves to ensure the provision of services to residents on private land, profound fiscal questions arise. Who should pay for capital infrastructure? Who should pay for operations and maintenance? Who should pay for the actual resource, such as water or electricity? Should owners of private land (such as farms, mines and churches) be eligible for government capital subsidies? If residents on private land (such as farmers and farm workers) use the facilities on public land (such as streets, libraries and cemeteries), should the owners of private land make a contribution towards rates and taxes?
5. Several municipalities have recently extended their rates systems to agricultural land, although this has been done in a very extremist fashion, with inordinately high rates levels and little clarity on the intended use of this additional revenue. These municipal actions have been successfully challenged in the courts by agricultural associations.

In South Africa, many mines have historically not paid municipal rates – particularly those situated in rural areas. This situation is about to change dramatically. With the extension of municipal boundaries to include all rural areas, *all property now becomes rateable*. Just as the case with agricultural land, municipalities are likely to extend their tax net soon, which will provide much-needed municipal revenue. The new Municipal Property Rates Act (Act 6 of 2004) enables the extension of the municipal rating system to all property-owners, whether rural or urban. Each municipality will decide if, when and to what extent it wants to extend its rating system to new types of land owners.

Parenthetically, it should be noted that the issue of municipal rates is far removed from the question of a “land tax”, which was extensively debated in the mid-1990s. Rural rates are intended to contribute towards local infrastructure and services, and not to serve as a general source of national government revenue, or to change patterns of land ownership, or to redress historical injustices. Rural rates are a highly pragmatic policy issue, and should be linked clearly to rights and obligations regarding access to services and infrastructure. In sum, all municipal residents (mines and mine workers included) are *entitled* to certain types of services and infrastructure (such as roads, water, sanitation, electricity, cemeteries, and libraries), and may well be entitled to capital subsidies to install those services. But then all municipal residents presumably have *obligations* to contribute to such public overheads.

Of course, where private land owners are already providing services (such as farmers or mines which provide housing and water), those investments should be off-set against the level of rates to be paid. Furthermore, if mines were to be registered by municipalities as “services intermediaries”, they would be able to negotiate their rights and obligations (within the limits of municipal by-laws). For example, it may be possible for land owners (such as farmers or mines) to charge residents on their land a tariff for the use of water and sanitation.

The Municipal Property Rates Act provides for a viable, fair and equitable system of municipal rates. Many checks and balances have been included, to prevent excessive rates being levied. The Act has several provisions which are of interest to land owners. It makes provision for exemptions and rebates, and it requires the municipality to promote local social and economic development, which would, presumably, include rural development. Section 4 provides that, before the municipality adopts its rates policy, it must follow a process of community participation. Section 21 provides that a rate levied on newly rateable property must be phased in over a period of three financial years. Land owners can appeal to provincial Valuation Appeal Boards if they disagree with the valuation of their property. Furthermore, by paying municipal rates, the land owner has now gained a moral and political claim on the municipality to provide him with services of some kind.

It remains to be seen how municipalities will go about introducing rural rates. National government is placing increasing pressure on municipalities to behave in financially responsible ways. This should obviate excessive demands on the mines in future, at least in the longer term.

There is an important link between the issue of municipal rates, and the compilation of IDPs. Municipal budgets are now required to be drafted in accordance with the developmental goals specified in the IDPs. The inclusion of new programmes in the IDPs may well require additional funding streams, which may lead to higher municipal rates. The compilation of IDPs is also a useful opportunity for mines to reflect on the many “hidden” municipal services that their employees may be using, such as urban streets, stormwater drainage, street lights, libraries, museums and cemeteries.

If the mines may become liable for municipal rates in future, then they need to start thinking now about how to structure royalties and national taxes (i.e. how to decrease them), and then they will be able to pay towards local rates. *The*

*important thing is that they should not pay more tax overall, but rather to pay some tax to the national, and some to municipalities.* To negotiate this kind of arrangement, municipalities should become important lobbying partners of the mining industry; in effect, the standpoint would be that *some of the mines' tax burden should be received by their host communities, and not simply disappear into the national fiscus.* Given the importance of mines' participation in municipal IDPs, such a fiscal system may well *increase* the influence of mines over the use to which their tax revenue is put.

It should also be remembered that the Regional Service Council levies are likely to fall away in future, and that a replacement for this tax is being discussed. The mining industry should follow these debates.

In the meantime, there is an urgent need for municipalities to begin to understand the economics of mining, agriculture etc, so that they do not lay down exorbitant rates. There is a need for collaboration and discussion and negotiation and mutual understanding, long before the issue becomes a crisis. The Chamber needs to facilitate this discussion with DME, before it becomes controversial in the public media.

The question extension of municipal rates should also be seen in the light of arguments for Sustainability Funds in the mining sector. Such Funds have been proposed<sup>35</sup>, precisely because current tax instruments do not channel mining tax revenue into the local communities or local environments. The use of municipal rates would achieve some of the same goals as a Sustainability Fund or a Trust Fund, because it would help to create a more direct link between mining revenues and local beneficiaries. However, Trust Funds have definite advantages: a capital resource is protected from irresponsible expenditures by governments, and specially designated trustees are appointed to supervise the fund.<sup>36</sup> This would protect the revenue from being mis-spent by local governments, or from being used up immediately.<sup>37</sup> By extending the life of the Fund's capital base, it will help to neutralize the "boom/bust" characteristics of many mining towns.

A "combined approach", which links the advantages of trust funds and municipal rates, may be the payment of municipal rates into a dedicated mining-municipal fund, which is then used for social expenditures which are closely linked to the mining sector (for example, are reserved for communities living in the direct proximity of the mine). The principal capital of the fund or the dedicate rate account should be invested according to strict guidelines, and used only for pre-determined social purposes. This would enable a credit balance to be built up, which will have the advantage of releasing mining revenue into the community long after a mine has closed, and can be used particularly to reduce the negative consequences of mine downscaling.

It is critically important that public revenue, drawn from the mining sector, is set aside for communities, whether by means of municipal rates, or by a dedicated sustainability fund, or a combination of the two. Specific proposals for South African situations should be worked out, in discussions with the DME and relevant municipalities (district and/or local municipalities).

## **6 SO WHAT SHOULD MINES DO?**

This paper proposes nine key levels of intervention:

1. Get to understand the sustainable livelihoods approach, and the identification of skills, assets and blockages to the use of assets. New staff members need to get exposure and hands-on experience to using SL methodology.
2. Get to know your District and Local Municipality, as part of the IDP process, but also as part of discussions on Local Economic Development, land reform, the use of social facilities, and other topics. Explore ways of institutionalizing partnerships, for example by municipal Section 21 companies.
3. Make mine-related facilities and resources available (buildings, skills etc), for municipal use, where possible.
4. Participate in municipal planning, notably the IDP, but also Water Services Plans, Transport Plans, LED plans, and spatial plans.
5. Create partnerships (find facilitators if necessary) for developmental programmes in sectors which are not mines' core business (such as health and welfare).
6. Create dedicated funds for draw-down community grants, or negotiate a dedicated municipal rates fund.



7. Plan ahead for closure. The mining sector urgently needs to encourage national government to become involved in areas threatened within mining closure.
8. Monitor outputs and impacts of development projects and programmes.
9. Evaluate progress and share lessons amongst mining fraternity. It is important to create structured evaluation methodologies, so that mines can compare their experiences in a meaningful way.

In this section, four of these themes are described in more detail: The use of mine-related assets; the promotion of non-mining developmental programmes; the creation of dedicated development funds; and new strategies to cope with mining closure.

## 6.1 Mine-related activities and assets

Mine-related activities and assets can be made available even when the mine is still at peak production, but more pressingly, it should be considered when mines are scaling down and alternative local livelihoods need to be developed.

These initiatives include:

1. *Mine workers' training:* Assisting employees to broaden their level of skills and education to increase their chances of finding alternative livelihoods in the event of mining down-scaling or closure (artisanal skills are particularly important).
2. *Creating capital savings:* Promoting savings schemes by employees, and providing financial advice to employees to generate capital for future independent livelihoods.
3. *Utilising redundant mining facilities,* e.g. using slimes dam soils for the fattening of flower bulbs, or using mining tunnels for growing mushrooms.
4. *Utilising redundant buildings,* e.g. using workshops for community training programmes, using housing schemes for youth break-away camps; using residential facilities as retirement villages; using mining clinics as centres for occupational health programmes; and using mine sports facilities for community sports training and tournaments; or using water storage facilities for industry or agriculture. Some of these uses can become important new local competitive advantages, and may contribute to saving local communities in the event of a mine closure.
5. *Building contractors' skills and experience:* Out-source as many management and technical functions as possible to local providers, and assist them to manage their own enterprises. The most appropriate functions are, for example, vehicle maintenance, buildings maintenance, security, catering, accommodation, and transport. It may be necessary to assist emergent contractors with initial start-up loans, as well as training and mentoring, and facilitating partnerships with more established contractors.
6. *Promoting small-scale or artisanal mining:* Even though these miners do not function under the auspices or control of large mines, and often have practices which large companies find unacceptable, large mining companies have valuable technical and management skills which can assist these small operators.
7. *Promoting the recycling of mining waste,* such as mining dumps for bricks, road construction, or ceramics.
8. *Promoting mine tourism,* by opening mining facilities to the public. Local community members need to be trained as tour guides.

In many of these cases, mines can make available their own staff to provide specialist support. This requires the allocation of staff time, as well as the use of appropriate company equipment, where necessary.

## 6.2 Non-mining developmental programmes

For mines to pursue more general development programmes in the community (such as health, housing, policing or welfare programmes) often requires mines to step out beyond their core business.

Company-sponsored programmes should be clearly targeted for maximum impact on the promotion of community assets and livelihoods. In selecting possible programmes, it is very important that mines conduct their own

investigations with regards to community needs, or co-operate with other agencies in this process. The Sustainable Livelihoods Framework offers a valuable tool to assess current community strengths, as well as obstacles in the full utilization of those strengths. What activities and projects are already taking place in the community? What are their key successes and failures? Are there important gaps, such as a lack of appropriately-trained people, or a lack of finance, or a need for better facilities and infrastructure? The creation of an inventory of existing skills and facilities is usually a good place to start such an analysis.

Undertaking such analysis inevitably requires the participation of community groups as well as municipalities. These consultative and participatory research processes are a valuable component of a municipality's IDP process. In fact, mines are well placed to contribute funds to municipalities to undertake such consultative processes. This will help to remedy the problem, experienced by so many municipalities, that their IDP processes tend to be top-heavy and dominated by consultants. From the Sustainable Livelihoods point of view, it is critically important that local interest groups be identified and consulted about their assets, their livelihoods aspirations, and their capacity gaps<sup>38</sup>. The "reach of the state" is often very limited, particularly in rural areas and amongst marginalized communities. Mines may provide sophisticated skills (such as facilitation skills and GIS systems), to assist municipalities in the drafting of their IDPs.

Typically, mines do not have the specialist knowledge to undertake such development programmes. They can therefore either donate funds so that other agencies can acquire such specialists, or they can make their own assets available (such as specialist skills or buildings and facilities).

Mines are well-placed to compare initiatives within the mining sector, and to introduce new ideas and approaches to local development planning processes. It is important that mines confer with one another about "what works", and how new types of support can be designed.

The selection of appropriate programmes may well draw on the notion of mines' "enlightened self-interest", referred to earlier. If there are indirect company benefits to promoting specific types of local development, this will enhance the commitment of mining companies to these development programmes. For example, the decision to assist communities to diversify their contracting and entrepreneurial skills may well benefit mining companies' local operations.

Generally, it is highly advisable that mines enter into partnerships with NGOs or government agencies, in the development of local programmes. This reduces dependency on the mine, and promotes the sustainability of these programmes. It also promotes the sharing of skills and experience, and may assist in leveraging additional financial and human resources. Such partnerships should be structured on the basis of clear agreements, specifying roles, responsibilities, time frames, and monitoring procedures.

Where municipalities clearly lack the capacity to undertake developmental programmes, mines may be able to make a major contribution. For example, municipal development officers can be trained in programme design, project management, budgeting, financial management, and M&E.

### **6.3 Creating financial instruments**

The creation of dedicated funds for community development is strongly recommended, and is becoming a widespread practice internationally. Such funds will enable community members to apply for, and "draw down", appropriately sized grants for specific initiatives.

The funds are typically controlled jointly by the mine, the community, and other relevant stakeholders (such as local government).

### **6.4 Coping with downscaling and closure**

The municipal IDPs surveyed for this report show a great deal of concern with the prospect of mining closures. Some of these issues include:

- Acquiring and using redundant mining assets
- Promoting other sectors, such as tourism, jewelry and small mining.

In recent years, mines all over the world have been scaling down or closing completely. These closures have witnessed the loss of tens of thousands of mining jobs, and the effective economic collapse of once-prosperous mining centres. An important principle is to minimize the consequences of mine closure on workers and communities by fully integrating plans for the life cycle of mining operations into the economic development plans of mining-dependent communities.

In some areas, innovative local initiatives have led to either economic and industrial restructuring, the transformation of redundant landscapes and industrial infrastructure into tourist and heritage features, or the creation of new economic activity.

None of these alternatives are easy. They tend to have to compete with similar initiatives located in more suitable parts of the country; or the local skills are not sufficient; or they require supportive services that are not available.

Furthermore, as Etienne Nel argued<sup>39</sup>, such initiatives have important prerequisites. It is imperative that local leaders take significant *proactive* steps to resuscitate and diversify the local economy, and to draw in external investment and support. (Even then, it is highly unlikely that the same number of jobs would be created as was the case with the local mine). The quality of leadership is an absolutely critical factor. And yet the troubles of the mining communities typically happen at exactly the same time as the departure of skilled, talented and entrepreneurial employees.

Resuscitation or economic diversification is often extremely difficult, given the entrenched legacies of a narrow skills and class base, limited available support structures and capacity for alternative sectors, and negative perceptions of areas in decline. Even with dynamic leadership, few alternative ventures actually succeed, either because of market saturation or because the projects are not inherently economically viable. The physical isolation of many mines, and the narrow skills base also complicate matters. In South Africa, the intractable race relations in many communities, which prevents effective partnerships and coalitions across racial lines, is a major complicating factor, as the case of Virginia demonstrates.<sup>40</sup>

Another difficulty, as demonstrated in the case of the Welkom area, is that mines are selling off their infrastructural assets, in order to remove redundant infrastructure from their list of closure liabilities. Such sales often precede community initiatives to use the buildings for alternative economic activities.<sup>41</sup>

It is increasingly recognized that responses to mine closure require a much more proactive closure *policies* and programmes, by government at all levels, and with effective mine involvement at all stages: In the words of a 1993 study<sup>42</sup>, “The need is for planned down-scaling, rather than the kind of *ad hoc* process currently occurring”. Planning for closure should start when the mine *begins* production. The new requirement that mining companies compile Social Plans goes a long way towards entrenching this type of long-term planning.

What seems missing from the South African situation, thus far, is the active involvement of *central government* in dealing with mine closures. It appears that central government has done virtually nothing to alleviate these crises. In the Free State, the provincial government has shown little interest in the plight of the Goldfields. This shows the need for issues of mine closure to be put much higher on the government agenda. To expect municipalities to carry this burden, often at a time when their rates base is being undermined, is completely unrealistic. International case studies suggest that governments need to be involved in the restructuring or closure process. For example, grants need to be provided to assist companies to increase their productivity, or to change their production processes, or to diversify local economic activities.<sup>43</sup> It may be simply unrealistic – or downright destructive – to expect mines and municipalities to be able to transform their economic base. There is surely a claim on the government fiscus to assist with these challenges.

Already, some government programmes can be brought to bear to assist communities with “coping with closure”. The Department of Trade and Industry, the Department of Labour, the Department of Agriculture, and the Department of Public Works, are prime candidates for becoming centrally involved in planning for closure.

An additional cause for concern is the fate of retrenched miners, and the impact of unemployment on labour-sending areas. put their retrenchment packages. Workers’ lack of business experience, and the lack of role models within the community, made it more difficult for people to contemplate small businesses. It is also clear that retrenched mine workers found that the younger men cannot simply ‘return’ to subsistence farming. They had grown up in a society dependent on migrant workers’ remittances. Some workers had inherited land, but many appear to be landless. Agriculture requires cash inputs, and for this, their families had depended on remittances.

To address these issues requires an intensive study of livelihoods dynamics in “deep rural” areas, whether within South Africa or not. The Sustainable Livelihoods framework can help mines – in partnership with government departments and municipalities – to identify local “assets”, and to assist retrenched mine-workers to identify new livelihoods options. Valuable SL-oriented studies have been conducted in the deep rural areas of the Eastern Cape and Zambia<sup>44</sup>, which highlight focused and critical interventions which can be undertaken. In many cases, these interventions are not particularly expensive, but they focus on local communities’ assets, livelihoods and capacity gaps. For example, building hawkers storage facilities will have a major impact on local people’s ability to conduct roadside trade; distributing information about start-up loans will assist entrepreneurs to expand their businesses; and building short stretches of road, or well-placed bridges, will help to make schools and shops accessible to isolated communities. In the

Eastern Cape, the marketing efforts of the Woolgrowers' Association have had far-reaching impacts on farmers' incomes.

## **7 CONCLUSION**

This paper has argued that mines will benefit from entering partnerships with government agencies and municipalities, to promote sustainable development. For this to be done effectively, mines need to engage with provincial and municipal planning processes.

A comparison of municipal IDPs gives an insight into the issues which municipalities currently find pressing. Some of these issues challenge mines to become more involved in local development initiatives. The use of the Sustainable Livelihoods framework, with its emphasis on building local assets, is a useful way approach new initiatives and to re-think existing ones.

South African mines have come a long way, in terms of their commitment to local development. They are already funding and assisting many local projects. The new requirement to write Social Plans is encouraging mines to develop even more far-reaching programmes and projects than they are already doing. What is now needed, is for the interventions of mines, government departments and municipalities to find common points of contact, so that partnerships can be forged and synergies can be exploited. Only with this level of "critical mass" will the challenges of *sustainable* development be adequately addressed.

## 8 APPENDIX A: MUNICIPALITIES INCLUDED IN THE SURVEY

The following is a list of municipalities and mines. (Municipal names in **bold** indicate municipalities for which the IDPs were examined).

This table is a consolidation of information drawn from several sources:

- The Demarcation Board website ([www.demarcation.org.za](http://www.demarcation.org.za))
- Mbendi website
- Gaffney's *Local Government in South Africa, 2005*.

A few caveats should be made about the Table above:

- It is not a complete list of mines, nor a complete list of municipalities where mines are found
- Some of the mines' names may be out of date
- Some of the municipalities' names may be out of date
- Some local and district municipalities are *cross-border municipalities*, i.e. they fall into two provinces *simultaneously*, and it is therefore difficult to classify them on a provincial basis
- Some mining operations straddle different local municipal boundaries, or different district municipal boundaries
- There may be confusions between the names of mines and the names of holding companies
- The list does not differentiate between closed, down-scaled, and active mines.

Province	District Municipality	Local municipality	IDP?	Towns	Selection of mines	Relevant mining products
North West	<b>Bojanala Platinum</b>	<b>Moses Kotane LM</b>		Sun City	Ruighoek Mine	Platinum, Asbestos, Tin, Chrome, Lead, Marble, Granite, Slate
	<b>Bojanala Platinum</b>	<b>Madibeng LM</b>		Brits	Vametco Minerals Corp (Vanadium) Hernic Ferrochrome (Chromite) Western Platinum Mines Pandora Platinum (Amplats)	Platinum, Asbestos, Tin, Chrome, Lead, Marble, Granite, Slate, Vanadium
	<b>Bojanala Platinum</b>	<b>Rustenburg LM</b>		Rustenburg	Bafokeng North Mines Bafokeng South Mines Bleskop Mines Paardekraal Platinum Mine Rustenburg Platinum Mines (Amplats) Kroondal (Anglo Plats)	Platinum, Asbestos, Tin, Chrome, Lead, Marble, Granite, Slate
	<b>Central DM</b>	<b>Ditsobotla LM</b>		Mafikeng	Floorspar Mine	Gold, diamonds, lime, salt
	Southern DM	Klerksdorp LM	No	Klerksdorp	Stilfontein Gold Mine Tau Lekoa (Goldfields) Buffelsfontein Gold Mines (DRD) Hartebeestfontein Gold Mine (DRD)	
Limpopo	Waterberg DM	<b>Mogalakwena LM</b>		Potgietersrus	Grass Valley Chrome Mine Potgietersrust Platinum (Amplats)	Clay, Platinum,



						granite, diamonds, tin, limestone, chrome
	Waterberg DM	<b>Thabazimbi LM</b>		Thabazimbi	Thabazimbi Iron Ore Mine (Kumba) Rooiberg Tin Mine Northam Platinum (Amplats) Rustenburg Platinum (Amplats) Amandelbult Platinum (Amplats)	Iron
	<b>Vhembe DM</b>			Musina	Harper Mine Compound Kempo Mine Compound Venetia Diamond Mine (ARM)	?
	<b>Vhembe DM</b>	Mutale LM	No	Tshikunda-malema	Nyala Magnesium Mine Tshikondeni Mine (Kumba)	
	Mopani DM	Ba-Phalaborwa LM	No	Phalaborwa	Phalaborwa Mine (Palabora Mining) Consolidated Murchison (Metorex)	Copper Antimony
Mpumalanga/ Limpopo	<b>Greater Sekhukhune DM</b>			Groblersdal		?
	<b>Greater Sekhukhune DM</b>	<b>Greater Tubatse LM</b>		Burgersfort	Modikwa (Anglo Platinum) Der Brochen (Anglo Plats) Marula 8 possible new platinum mines Doornbosch Mine Lavino Chrome Mine Magnetite Mine Montrose Mine Winterveld Mine Dwarsrivier Chrome (Assmang)	Platinum Chrome Magnetite
	<b>Greater Sekhukhune</b>	Fetakgomo			G-Phasha Project (Lebowa Platinum - Amplats) Twickenham (Anglo Plats) Modikwa West (Anglo Plats)	
	<b>Greater Sekhukhune</b>	Makhudutamaga			Modikwa (Anglo Plats)	Platinum
Gauteng	<b>West Rand DM</b>	<b>Merafong LM</b>		Carletonville	Deelkraal Gold Mine (Harmony) East Driefontein Mine (Goldfields) Western Deep Levels Mine Elandsrand Gold Mine (Harmony)	Gold
	<b>West Rand DN</b>	<b>Randfontein LM</b>		Randfontein	Panvlak Gold Mine Randfontein Estate Gold Mine (Harmony) Lindum Reefs Gold Mine (Randfontein Estates)	Gold
	<b>West Rand DM</b>	<b>Westonaria LM</b>		Westonaria	Cooke Mine Elsburg Gold Mine Kloof Gold Mine (Kloof Div) Leeudoorn Mine (Kloof Div) Libanon Gold Mine (Kloof Div) Panvlak Gold Mine Venterspost Gold Mine South Deep Gold Mine	Gold
	<b>West Rand DM</b>	<b>Mogale City LM</b>		Magaliesberg	Westrand Consolidated Gold Mine (Harmony) Krugersdorp West Mine	Gold
	<b>Ekhurhuleni Metro</b>			Kempton Park	Brakpan; Benoni Gold Mines Company; ERGO; Modderfontein; Sallies East Rand	Gold

					Proprietary Mines Geduld Proprietary Mines Government Gold Mine Grootvlei Proprietary Mines Nigel Gold Mine SA Land Exploration Gold Mine Simmer and Jack Gold Mine Sub-Nigel Gold Mine Van Ryn Gold Mine Wit Deep Gold Mine	
	<b>Sedibeng DM</b>	<b>Lesedi LM</b>		Heidelberg	East Daggafontein Gold Mine	Gold?
	Johannesburg Metro		No		City Deep Gold Mine Crown Mines Village Main Reef Gold Mine Rand Leases Gold Mine South Roodepoort Main Reef Areas Gold Mine	
Northern Cape	<b>Frances Baard DM</b>	<b>Sol Plaatje LM</b>	No	Kimberley	Bellsbank Diamond Mines Bultfontein Mine	Diamonds
	Namaqualand DM	<b>Nama Khoi LM</b>		Springbok	O'kiep (OCC/Metorex) Nigrampoep (OCC/Metorex)	Copper
	Kgalagadi DM	Gamagara LM	No	Kuruman/ Sishen	Blackrock Sishen Iron Ore Co. (Kumba)	Iron (Sishen) Asbestos
				Hotazel	Mamatwan Mine Wessels Mine Hotazel Mine (Samancor)	Manganese
	Namaqualand DM	Khai Ma LM	No	Pofadder	Black Mountain (Anglo)	Zinc and Lead
	Karoo DM	Siyathemba LM	No	Prieska	Prieska Copper Mines (ARM)	
	Siyanda DM	Tsantsabane LM	No	Postmasburg	Beeshoek Iron Ore (Assmang)	
Free State	<b>Lejweleputswa DM</b>	<b>Matjhabeng LM</b>		Welkom	Pres. Steyn Erfdeel Mine Freddies Gold Mine Free State Geduld Gold Mine Jurgenshof Unisel Gold Mine Loraine Gold Mine Merriespruit Gold Mine Premier Brand Gold Mine Saaiplaas Virginia Goldmine Welkom Gold Mine Western Holdings Gold Mine Matjhabeng Gold Mine (Harmony) Bambanani (Harmony) Free State Operations (Harmony) Target Gold Mine (Harmony) Tshepong North Shaft (Harmony)	Gold
	<b>Lejweleputswa DM</b>	<b>Masilonyana LM</b>		Winburg/ Theunissen	Beatrix Mine Joel Mine (Harmony) Star Diamond	Gold
	Northern FS DM	Moghaka LM	No		Vaal Reefs Mine	
Mpumalanga	Ehlanzeni DM	<b>Nkomazi LM</b>		Komatipoort	Strathmore Mine	?
		<b>Umjindi LM</b>		Barberton	Sheba Mine Bonanza Gold Mine Agnes Gold Mine (Ridge) Fairview Gold Mine (Harmony)	Gold, coal, lignite, uranium ore, iron ore, clay, diamonds
		Ehlanzeni LM	No	Lydenburg	Booyensdal JV (Am Plats)	Platinum
	Nkangala DM	<b>Emalahleni LM</b>		Witbank	Malta Coal Mine Rietspruit Opencast Mine	Coal
		Steve Tshwete	No	Middelburg	Mineralia	

		LM				
		Delmas LM	No	Delmas	Leeuwpan Coal Mine (Kumba)	
		No		Machadodorp	Nkomati Mine (ARM) Machadodorp Ferrous Metals Beneficiation (Assmang)	Nickel
	Gert Sibande DM	Govan Mbeki LM	No		Highveld Ridge Mines Leslie Gold Mines (Harmony) Winkelhaak Mines Evander Gold Mine (Harmony)	
KwaZulu- Natal	<b>Zululand DM</b>			Ulundi Vryheid	Zululand Anthracite Colliery Kangra Group (Coal) Enyati Anthracite Mine	Coal
	<b>Uthungulu DM</b>	uMhlatuze LM	No	Richards Bay	Richard's Bay Minerals	Titanium

## 9 APPENDIX B: DEVELOPMENTAL ISSUES IN MUNICIPAL IDPS AND COMPANY REPORTS

**Table 1: Municipal IDPs: The role of mines in the provision of social facilities**

Issue	Sample of municipalities	Possible involvement of mines, as reflected in IDP
Health; HIV/AIDS	Bojanala Platinum DM	A Working Group comprising representatives from each local municipality and the Department of Health should be established to: <ul style="list-style-type: none"> <li>• implement an HIV Programme focussing on Aids Awareness/Prevention, Aids Support and Aids Care, including care for the sick and orphans.</li> <li>• discuss <i>ad hoc</i> health issues</li> <li>• partnerships should be established with the existing Mine Hospitals.</li> </ul>
	Thabazimbi LM	<ul style="list-style-type: none"> <li>• Establish facilities for HIV/Aids patients within 2 years</li> <li>• Ask mine for assistance with clinic and other HIV/AIDS programmes.</li> </ul>
Education	-	Need new primary school in Mokopane in order to cater for the needs of mine employees.
Social facilities	-	-
Recreation	Greater Tubatse	Sport and recreation facilities generally only exist at the schools and mines. Hence, these facilities are placed in the urban areas and are therefore not accessible to the extended rural population. Confirmation thereof, is evident in the fact that there are no sports facilities available to the residents of Burgersfort and minimal facilities (2 tennis courts, and a sports field) available in Ohrigstad. The town of Steelpoort has a 9 hole golf course, 2 swimming pools and a sports building which have mostly been developed by the Tubatse Mine.
	Westonaria	Under utilisation / exclusiveness of facilities provided at mines.

**Table 2: Company reports: The provision of social facilities**

Issue	Sample of mines	Issues reflected in company reports
Health	Anglo Platinum	HIV/AIDS partnership, workplace education, peer education, condom distribution, ongoing risk assessments, VCT, ART, support for traditional healers, Circle of Hope Community Project, mobile clinics
	Kumba	<ul style="list-style-type: none"> <li>• Testing, counselling, ARVs for HIV/AIDS of employees</li> <li>• Bayede AIDS education programme, KZN</li> </ul>
	BHP Billiton	<ul style="list-style-type: none"> <li>• Clinics, HIV/AIDS care centres, orphan care</li> <li>• Training and medical care for health officers in 2 municipalities (Uthungulu and Mkhanyakude DMs)</li> <li>• Support for Ethembeni Care Centre</li> <li>• Clinic at Ogies (Khutala)</li> </ul>
	Lonmin	<ul style="list-style-type: none"> <li>• Home-based care</li> <li>• DOTS for TB</li> <li>• In-school peer education programme: Youth camps.</li> <li>• Home-based care programme.</li> </ul>
Education	Anglo Platinum	Schools project – improve managerial capacity at schools, employment of teachers, teacher training, additional science tuition, Rural Schools Programme, computer centres, short story competition, school renovation
	Kumba	Deben school hostel, Northern Cape Kumba Bridging School
	BHP Billiton	<ul style="list-style-type: none"> <li>• Partnerships-in-Education Network, Zululand, KZN – 38 township and rural schools – winner, BHP Billiton community award</li> <li>• Support for University of Zululand Science Centre (Hillside)</li> <li>• Support for Zululand Careers and Lifeskills Centre (Hillside)</li> <li>• Supports Centre for the Advancement of Science and Maths Education (Hillside)</li> <li>• Sponsorship for ReadRight Project</li> <li>• Ingwe Science School, Kwa-Guqa</li> </ul>

		<ul style="list-style-type: none"> <li>• Highveld Greening Project (Ingwe)</li> <li>• Purchase of school books and computers (Khutala)</li> <li>• Funding and support for local primary school (Pering, Reivilo)</li> </ul>
	Lonmin	Bursary scheme Sponsoring of schools
Social facilities	BHP Billiton	Safe house for victims of crime, mobile clinic, home for disabled people, Middelburg Mine Supplies of food to schools, Western Chrome Mine, Mooinooi Support for training of pre-school teachers (Hillside) Middelburg Care Village – HIV/AIDS orphans (Ingwe) Grants to environmental organizations, including Wildlife Trust (Hillside) Donations to Child Welfare, SPCA, Business Against Crime, National Sea Rescue Institute (Hillside)
	Lonmin	Creches, orphanages, recreation facilities, Mooinooi police station
Recreation	-	

**Table 3: Municipal IDPs: Mining, housing, spatial planning and infrastructure issues**

Issue	Sample of municipalities	Possible involvement of mines, as reflected in IDP
Informal housing	Bojanala Platinum DM	To put in place a pre-active approach towards addressing the problem of informal settlement as part of a joint venture with the mining houses. The DM, the mining houses and the Royal Bafokeng National are working on a holistic, integrated strategy towards addressing the problem of informal settlement along the mining belt in the Greater Rustenburg area.
	Thabazimbi LM	Schilpadnest is located adjacent to Amandelbult. The settlement is located on an area, which is very unsafe for residential purposes, due to underground mining activities. A number of efforts have been made by the Waterberg District Municipality, the Department of Land Affairs in collaboration with the mine to resettle the people currently residing at Schilpadnest to Northam, but all efforts failed thus far. Problems: <ul style="list-style-type: none"> <li>▪ Mine as landowner not taking enough action against illegal occupation of land</li> <li>▪ People refuse to move to Northam where Housing is currently being provided</li> <li>▪ Council is afraid to talk to Mines, as they are afraid that people will get evicted.</li> </ul> Need: <ul style="list-style-type: none"> <li>▪ Discussions with Mine</li> <li>▪ Identify alternative land and purchase for new settlement</li> <li>▪ Mine make provision for families within premises</li> <li>▪ Offer financial benefits to motivate people to move to Northam</li> </ul>
Housing	Madibeng LM (Brits/ Hartbeesfontein)	The recent trend in the mining industry is to accommodate their work force at the nearest towns and settlements by giving government housing subsidies. Mines should not be allowed to shift the entire responsibility of this into the hands of local government, but should be held accountable for the orderly and sustainable urbanisation of its workforce.
	Thabazimbi LM	Encourage mines to provide family units and not hostels at Mines.
	Emalahleni LM (Ogies)	Rehabilitation of undermined ground: Need to resettle informal residents on land that is unsuitable for development such as undermined ground.
	Merafong LM (Carletonville)	To proceed with the transfer of around 4000 mine houses to municipal control, particularly in the light of future mine closures.
	Mogalakwena LM	Need 1000 houses in town in order to accommodate their new staff that will be hired as part of expansion of the mine.
	Rustenburg LM	There is a very large need for housing in the Rustenburg area, due to in-migration of people as a result of mining. They settle in one of the many illegal squatter areas adjacent to the mines. There is also a large number “backyard dwellers” especially in Tlhabane and the Boitekong areas. A conservative estimate is that there are at least 25 000 families in the Rustenburg area in need of formal housing. The RLM should investigate the establishment of joint ventures with the private sector e.g. mining houses, to render services in some areas on an agency basis.
	Thabazimbi LM	Pressure of in-migration and housing need (800 units at Thabazimbi, 1000 at Northam, 200 at Raputi Stad, 300 at Koedoeskop): There is a need to transform hostels into family units at the Mines.



		Need new residential areas: Demarcate erven and provide infrastructure.
Regional and spatial planning	Madibeng LM	Mining in Madibeng predominantly occurs in a belt along the Merensky Reef, with several new open cast mines. Need to develop this corridor for residential, industrial, commercial uses.
	Ekhurhuleni Metro	Need to develop large tracts of vacant land, old mine dumps and derelict buildings scattered throughout the region. Problem of undermined land and sinkholes.
	Emalahleni LM (Ogies)	To successfully integrate the mine villages into the services and systems of Emalahleni Local Municipal Council. Need to compile a program for the proclamation of mine villages
	Mogalakwena LM	<p>It is important to locate and describe those mineral occurrences, the degree of the deposit, the current and possible future demand and price levels. In cases where no exploitation has taken place as yet, it is important to highlight the location of these particular zones in order to prevent or minimize their sterilization with other land-uses (e.g. urban development). This IDP has detailed spatial information on the location of mines and the occurrence of minerals.</p> <p>The incidence of mining areas within the municipal area, especially in a densely-populated environment, accentuates the conflict between sub-terranean and surface rights, especially where communities do not have a statutory right to the land on which they reside. The development of a mine could lead to job opportunities and an improved economy, but simultaneously disrupt the spatial development pattern, and negate certain development alternatives.</p> <p>If Mines for instance need to relocate people due to mining activities, areas within or in between the three Growth Points should be given preference for residential purposes.</p> <p>Four main areas of growth within the urban areas have been identified:</p> <ul style="list-style-type: none"> <li>• Areas of consolidation</li> <li>• Future Growth areas</li> <li>• Long term densification</li> <li>• Mining.</li> </ul> <p>The main aim of these areas is to direct residential development to achieve to locate people closer to job opportunities and closer to areas where jobs are being created. This is particularly important for the unemployed people currently residing within the rural areas. The appropriate planning decisions will create settlement concentrations, so that infrastructure, land and services are used optimally.</p>
	Randfontein LM	<p><i>Mining Zone:</i></p> <ul style="list-style-type: none"> <li>• Facilitation of urban integration.</li> <li>• Stimulation of corridor development along major routes.</li> <li>• Development of mixed land uses to promote integration and employment creation.</li> <li>• Extent of undermining, legislation and surface mining structures and dumps will determine nature and extent of development.</li> <li>• Possible provision of formal housing.</li> </ul> <p><i>Mining Transition Zone:</i></p> <ul style="list-style-type: none"> <li>• Transition zone between intensive mining activities and open area/game reserve.</li> <li>• Land use strategy to be determined with drafting of precinct plans.</li> <li>• The Randfontein Municipality Spatial Development Strategy is the manifestation of various trends and guiding principles, which include: <ul style="list-style-type: none"> <li>- The diversified nature of urban development;</li> <li>- The presence of unsuitable geo-technical conditions which hampers spontaneous urban development;</li> <li>- Land ownership which is primarily vested with mining / private landowners</li> <li>- The development of Tourist facilities.</li> </ul> </li> </ul>
	Rustenburg LM	The Platinum Group Metals ridge (4) divides the two residential components. This ridge follows the angle of the mountain range and is dominated by the mining activities. From an urban structural point of view the major challenge would be the linking of the two residential (and urban) components (5 and 6) across this ridge in order to achieve a more integrated whole. Because of the potential mining development in the reef zone (4) it is anticipated that this area will remain predominantly mining orientated.
	Thabazimbi LM	The settlement pattern of the Thabazimbi Municipality can mainly be ascribed to the location of the Mines in the area and the Spatial settlement was therefore mostly economically driven. Mining sterilises land for other development and care should be taken that mining practises should not to be allowed in environmental sensitive areas
	West Rand DM	The future growth patterns in this region cannot only depend on the mining sector.

		The east west routes linking Merafong City and Westonaria with central Gauteng are important factors in the identification of potential nodal areas. Each town forms a nodal area that could develop in itself. The intersection of the R28 and N12 at Westonaria is an important element in structuring future spatial development at this node. It is at this intersection where three sectors meet i.e., the mining, agriculture and urban development. The mining corridor is located on strong east west linkages within the West Rand. A lower density of linkages is required in this zone. Movement needs to be encouraged in an east west direction to link with central Gauteng. In the long term, the opportunity zone and mining corridor could meet, as the agricultural development of both zones is supportive of each other. Strong east west linkages need to be established in this zone R501, P111/1, N12, R559, Welverdiend-Westonaria-Johannesburg railway line and Oberholzer-Randfontein railway line. The railway lines are of significance for the development of mining clusters and the agricultural development associated with the Wonderfontein Spruit.
Intersectoral spatial planning	Madibeng LM	Where mining is pursued in areas other than the Merensky Reef, there should be caution against allowing mining in or near areas of high tourism potential, or allowing mining to encroach on intensive agricultural areas.
Infrastructure	Mogalakwena LM (Potgietersrus)	Need new road to mine, and better bulk water supply to mine. A lack of water for human consumption, business, industrial and agricultural development- this problem has resulted in a number of farms and mines closing down in the area.
	Thabazimbi LM	<b>Water:</b> In Rooiberg Town, there are only two boreholes providing water to Town. Water sources not reliable, fluoride level is too high. Establishment of Low cost Housing project at Rooiberg places additional pressure on water resources. Mine added to problems: It sold 6 boreholes previously used to private people; the 18km water pipeline between Leeupoort and Rooiberg were sold off as scrap metal; the de-fluoridization plant was sold. Now need a new pipeline. <b>Electricity:</b> Rooiberg, Leeuport and Thabazimbi: Power lines previously used by mines, sold by mine. Fluctuations of voltage due to Crusher outside town. Regular power cuts. Need to upgrade power supply for new residential areas. <b>Waste water:</b> Investigate possibility to use waste water from Amandelbult and Northam Platinum Mine for new sanitation system at Northam within 1 year

**Table 4: Company reports: Housing issues**

Issue	Sample of mines	Issues reflected in company reports
Housing, Infrastructure	Anglo Platinum	Roads, schools, housing, water pipeline, clinics Relocation, construction of new town, Sterkwater, Limpopo Provision of infrastructure, housing Modikwa, Twickenham – creation of new suburbs at Burgersfort Construction skills development
	Lonmin	Phasing out of hostels; new family housing Marikana Housing Development Company Housing workshops Karee 294 Housing Project

**Table 5: Municipal IDPs: The promotion of small-scale mining activities (“junior mines”)**

Sample of municipalities	Possible involvement of mines, as reflected in IDP
Greater Tubatse LM	Small-scale mining: Improve skills Study on Geology/Minerals/Mines and possible Small Mining Operations (SMME’s)
Sekhukhuneland DM	The Sekhukhune district is underlain by rocks containing the world’s largest deposits of platinum group metals (PGM’s), chrome and vanadium ore. The potential exists that small-scale mineral deposits can be developed by emergent or junior mining groups in the Fetakgomo area (see Fetakgomo LM). Areas in the municipal area where mineral deposits occur should be protected from any development that may sterilize any future exploitation. Suggests initiatives: <ul style="list-style-type: none"> <li>• Skills development on small-scale mining (Training workshops: Sekhukhune College)</li> </ul>

	Centre) <ul style="list-style-type: none"> <li>Offer revenues for entrepreneurs, familiarise PDI's with the Procurement Policy of the mines</li> </ul>
Lejweleputswa DM (Welkom area)	Strategies: <ul style="list-style-type: none"> <li>To develop a strategy for the establishment of small-scale mining and for support and related activities;</li> <li>To consult with the mining industry on measures which could improve the sustainability of existing mines and the opening of new mines.</li> </ul>
Masilonyana LM (Winburg area)	The potential exists for small scaled diamond mining in the areas north of Theunissen, especially since all of the Kimberlite pipes have been exhausted. Only the fissures are mined at this point in time. The introduction of small scale salt mining has proven very successful in the past and should be considered in Soutpan. Will open up discussions with Department of Mineral and Energy Affairs and mining houses that services purchased by the mines are done locally
Mogalakwena LM (Potgietersrust)	Small Scale Mining to be Assisted: Uitspan Village
Vhembe DM (Northern Limpopo)	The Department of Mineral and Energy Affairs has set up a strategy to pilot small scale mining, municipalities are advised to consider alternative funding sources for implementing small scale mining projects, as the Department of Mineral and Energy Affairs is not currently in a position to support the capital and operating investment requirements of small- scale mining projects.
Ekhurhuleni Metro	The mining sector although in decline, can be stimulated to make a contribution to the economy, with promoting the expansion of artisanal and small-scale mining. Profitable business opportunities through recovering gold and other materials in the surface mine residue deposits, need to be developed. Currently there are a number of informal and illegal, small-scale mining ventures recovering material from the mining residue deposits. Turning this informal, illegal activity into a formal, legal activity facilitates poverty alleviation. The recently introduced legislation provides the opportunity for the ownership of minerals and the right to mine to be distributed among the historically disadvantaged people and women in particular. It also provides the opportunity for creating a new revenue stream for the Metropolitan Municipality based on land owned by the government. Ekhurhuleni Metro has created a Mining Forum to co-ordinate strategic interventions in mining. Information about mining contact details is made available to small-scale miners.
Nama Khoi LM (Springbok)	Die Kleinmyners vind dit moeilik om in mynbou betrokke te raak as gevolg aan gebrek aan kapitaal en kundigheid. 'n Kleinmynersvereniging in Nama Khoi Munisipale gebied is gestig , maar gaan deur n fase van onaktiewiteit. Swart ekonomiese bemagtiging moet n prioriteit raak ten opsigte van basiese minerale en edelgesteentes.
Central DM	With regards to small & medium size operators, the recent initiative of MINTEC to secure partners in this regard was an ideal opportunity. The intention is to establish a number of small and medium sized operators which will be supported by an incubator Support Structure, resulting in a number of PDI participants at various levels. Possibility of diggings or small scale diamond mining at Bakerville. The DM will ascertain the extent of the local community as beneficiaries. Assist with obtaining funding for equipment for small scale diamond mining (R 15,000 during 2002/2003).
Mbombela LM	Promoting small-scale mining by (1) Providing training and financial assistance to enable small-scale mining operators to enter the market; and (2) Strengthening the mining product value chain by encouraging mining activities that supply local markets, e.g. the construction industry.
Ehlanzeni DM	Small-scale miners need targeted support.
Mogale City LM	Small-scale mining should be part of SMME development.

**Table 6: Municipal IDPs: The role of mines in the promotion of income-generating activities**

Issue	Sample of municipalities	Possible involvement of mines, as reflected in IDP
Investment promotion	Greater Tubatse LM	<ul style="list-style-type: none"> <li>The area is experiencing a significant outflow of capital.</li> <li>To minimise the outflow of capital particularly related to the mines</li> <li>To co-operate with the mines to devise ways and means to achieve reinvestment in the area through job creation, development and service provision.</li> </ul>

Local sourcing	Madibeng LM (Brits)	<i>Local sourcing:</i> Mines should be encouraged to source more of its requirements locally. Such demand for goods and services could serve as an important local income generator and overall economic development facilitator.
	Westonaria LM	Gold mining expenditure on stores are massive in volume. This expenditure is three times that of the size of manufacturing GGP. Gold mines purchase mainly outside boundaries of Western Gauteng, and therefore there are massive leakages. The purchasing practices of gold mines hold potential for the development of the manufacturing sector, and these are not utilised optimally. Stimulation of industrial and manufacturing development on the short to medium term should be linked to the inputs required by the mining industry,
Job creation	Nkomazi LM (Komatipoort)	Encourage existing business to play an active role in job creation.
Community partnerships	Nkomazi LM (Komatipoort)	Prioritize discussions with the Benicon coal mines and plantation owners on PPP's community ownership and community upliftment.
Training	Thabazimbi LM	Train local people in skills required by mines. The Municipality wants to provide a training facility. Funding could be a joint venture between the Municipality and the Mines. Specific skills required by the mines could be taught at this facility.

**Table 7: Company reports: Promotion of income-generating activities**

Issue	Sample of mines	Issues reflected in company reports
Entrepreneurship promotion	Anglo Platinum	Food gardens, home industries, small businesses Promotion of black-owned businesses Addiction to Business Project
	Kumba	Tshono Leather and Craft Project
	BHP Billiton	Sponsor of Business Development Centre (Hillside Aluminium) Support for Downstream Aluminium Pilot Project – SMME development (Hillside) Support for Craft Action Body – training and mentoring local crafters (Hillside) Kwazamokuhle Transport Training project (Ingwe) Isolokhozi Security (Ingwe) Thuthukani Safe Wear (Ingwe) Brickmaking project, sewing project (Khutala)
	Lonmin	Outsourcing to BEE companies Dressmaking school

**Table 8: Municipal IDPs: Possibilities for diversification**

Sample of municipalities	Possible involvement of mines, as reflected in IDP
Randfontein LM	<p>The mining sector is a high share / low growth (declining) sector, while the agriculture sector is a low share / high growth sector. In the Economic Development Strategy for the West Rand District Municipality, agriculture, mining, manufacturing and tourism can be regarded as the (potential) leading economic sectors.</p> <p>By means of innovative techniques, the impact of the declining mining sector on the economy can be mitigated and mining land can be re-integrated into the urban economy and fabric. The mining sector provides the following opportunities:</p> <ul style="list-style-type: none"> <li>• Subcontract small scale entrepreneurs to rehabilitate mining land;</li> <li>• Potential re-usage of buildings, equipment and other infrastructure by small-scale entrepreneurs;</li> <li>• Establishment of economically feasible land uses on mining land with a high development potential.</li> </ul>

Sol Plaatje LM (Kimberley)	The municipality is mindful of the shrinkage of the historical primary sectors of mining and manufacture. It requires more in depth analysis of the nature of this shift and the economic sectors and sub-sectors with greatest future potential.
West Rand DM	The mining activities are situated along the Gatsrant Ridge between Fochville and Carletonville. With the varying lifespan of the respective mines, it is important that the development strategies implemented in the short-to-medium term should actively seek to diversify the economy with a gradual shift from the mining sector as it is a net contribution to the local economy and is already diminishing gradually. Specific projects have been identified that could be in support of activities related to the mining sector. Mining clusters are located along the railway line, which could be localised economic activities, and support small mining related operations. Existing infrastructure should be optimally utilised.
Greater Tubatse LM (Burgersfort)	The lack of economic growth in the region warrants special attention and support to optimise the available opportunities. Although manufacturing is a relatively minor sector in the region and largely artificially stimulated by the homeland policies of the previous government, there is merit in investigating a focused industrial strategy that should be based on the many mineral resources available in the region aimed at creating spin-offs in the region and minimising the outflow of capital to other regions. The platinum resources within the area are abundant. Although there are presently few mines in the area, major mining companies have identified areas for future mine establishment. This suggests significant future investment and development aimed at exploring the natural resources. While this intended development can be beneficial for the area, it can also lead to an outflow of much needed capital, and hence, the local municipality must strengthen its position with the mining houses to ensure proper spin-offs for and direct investment into the area. The position of the mining belt strengthens the identification of the urban core.
Bojanala Platinum DM	There is a need to diversify the economy in order to make it less vulnerable to external shocks. The stimulation and enhancement of the industrial sector should form part of the strategy to diversify the local economy. Cognisance should be taken not only to concentrate on mining related industries (although they might still be important over the short and medium term) but also to stimulate industrial development not related to the mining sector ... Essentially the economy of this region needs to diversify with special emphasis on Small and Medium Enterprise Development.
Madibeng LM (Brits)	Madibeng's economy is dominated by the mining industry. Granite mining opens up a large number of local beneficiation opportunities related to mining, e.g. the manufacturing of jewellery, the development of a mining logistics hub and joint venture opportunities in community service delivery. To fully utilize its potential, the Brits-Rosslyn corridor should become the primary focus for residential, industrial, commercial and mining development, forming a band of mixed uses. Commercial uses in particular could be a significant contributing land use factor, especially when linked to the Platinum Corridor. The Brits-Rosslyn corridor can become the ideal place for storage of products before transporting and shipping.  Around 200 potential projects and project opportunities in tourism, manufacturing, agriculture and mining have been identified. These projects need capital investment of R730 million and the potential to create 9000 jobs in the short-to-medium term.  There is a need to implement unique and competitive investment incentive packages that will keep existing and lure new investors to the area. Numerous manufacturing development opportunities have been identified especially within the agriculture and mining industries, dominated by the local processing of available agricultural and mining sources.
Central DM (North West Province)	Potential flagship projects include: <ul style="list-style-type: none"> <li>• Platinum refining and Beneficiation Cluster</li> <li>• Gold Refining and Beneficiation Cluster</li> <li>• Diamond cutting and polishing/ Jewellery Cluster</li> <li>• Heavy Minerals Refining and Beneficiation Cluster</li> <li>• Dimension Stone and Slate beneficiation Cluster</li> <li>• Cement Production</li> </ul>
Ekhurhuleni Metro	Following a thorough analysis of the manufacturing base, the metal, mining equipment and plastics industries were selected for further development. In partnership with DTI and CSIR, the competitiveness of these industries is being stimulated. Interventions to unlock the value of the land devastated by mining are being explored



Lejweleputswa DM (Welkom area)	Strategy: To develop and implement a strategy for a jewellery manufacturing industry.
Merafong LM (Carletonville)	<p>The mining activities are situated along the Gatsrand Ridge between Fochville and Carletonville. With the varying lifespan of the respective mines, it is important that the development strategies implemented in the short-to-medium term should actively seek to diversify the economy with a gradual shift from the mining sector as it is a net contribution to the local economy and is already diminishing gradually. Here the Regeneration Study within the LED Section will play an important role.</p> <p>There are three important sectors which can play a leading role in this approach i.e. agro-industries and manufacturing linked to the massive expenditure of the gold mining industry on stores and equipment. Tourism is the third underdeveloped resource in the area that will receive attention. Aspects such as the Klerkskraal Dam, Khutsong caves, mining tourism Matabele Kraal, game farms in the area and the Earth Heritage Museum will contribute to a tourism value chain.</p> <p>Approximately 15 ha that belongs to the mines can be put under irrigation from the sewer purification plant. This land can be subdivided into 120 plots and made available to the wider community.</p>
Mogale City LM (Magaliesberg)	The tourism-SMMEs that could be promoted through specific projects, programmes and kick start funding, <i>inter alia</i> , for industrial/mining tourism (old mining sites), e.g. the first Gold Mine (Bloubank).
Sekhukhune DM (Limpopo)	<p>The mining belt is found on the north eastern part of the district and will become the main economic generator. The rural settlements are not informed by an economic base while mining has introduced own spatial dimension influenced by the presence of the mineral deposits. This needs appropriate planning to harness development spin – offs to the adjacent areas.</p> <p>Traditional mining development should be avoided. A diversified economy should be supported sharing the infrastructure that mining has created.</p> <p>Unfortunately most of the mine ores are not beneficiated within the area but extracted and exported in their raw form without adding value. This has an impact of limiting job opportunities and exposing the area to high capital investment in in the form of infrastructure with little benefits except in employment.</p>
Umjindi LM (Barberton)	<p>The mining sector, which contributes 11.2% to GGP, has however performed negatively over the long term, i.e. since 1985. An issue of considerable concern is the fact that the past, and anticipated declines of the mining sector in the sub-region will create additional unemployment and result in even more socio-economic hardships. Furthermore, there is no real prospect at present that these job losses can be made-up elsewhere in the mining sector within the subregion. Therefore, alternative sources of employment, especially in economic activities that do not specifically require highly skilled personnel, should be vigorously pursued.</p> <p>The following opportunities, in particular, may be developed to facilitate local beneficiation of mining and quarrying products:</p> <ul style="list-style-type: none"> <li>• Construction materials and brick-making.</li> <li>• Jewellery manufacturing after the gold has been processed.</li> <li>• Another opportunity that is already emerging in the market and that may be further exploited, is small-scale mining operations. The scope for market entry is, however, limited due to land and mineral rights ownership constraints.</li> </ul> <p>Yet another opportunity relates to the economic linkages between mining and tourism. The concept of “ the oldest and richest gold mine in South Africa”, may be combined to great effect with the development of old mining facilities into tourist attractions. Other aspects that enhance the uniqueness of Barberton in this respect, include the Barberton Greenstone Belt rocks, which are believed to be some of the oldest geological formations on earth.</p>

**Table 9: Company reports: Economic diversification**

Sample of mines	Issues reflected in company reports
BHP Billiton	Hydroponic vegetable project (Hillside) Zizise Farming (Ingwe)
Anglo Platinum	Policy to promote jewellery industry, including skills development: <ul style="list-style-type: none"> <li>• Annual design awards</li> <li>• Promoting local advertising of platinum products</li> </ul>

	<ul style="list-style-type: none"> <li>• Offer bursaries to students</li> <li>• Promote export market</li> </ul>
Lonmin	Itireleng Farming Project

**Table 10: Municipal IDPs: The role of mines in taxation**

Sample of municipalities	Possible involvement of mines, as reflected in IDP
Greater Tubatse LM (Burgersfort)	<p>The tax base in the region is extremely limited and does not suffice to provide local government with income.</p> <ul style="list-style-type: none"> <li>• Diversify the tax base of the area.</li> <li>• Improve local records of tax payers</li> <li>• Ensure that tax benefits are derived from the mines</li> <li>• Improve economic diversification</li> <li>• Update all records to create a new list of tax payers</li> <li>• Create a new structure of tax payment for mines to ensure some benefit is received by the local area.</li> </ul>

**Table 11: Municipal IDPs: The role of mines in environmental management**

Issue	Sample of municipalities	Possible involvement of mines, as reflected in IDP
Rehabilitation	Randfontein LM	Submission plans for the rehabilitation of open cast mining and slime dams are in place. Harmony Gold Mining Company are in the process to sell slime dams to a private company for re-processing for gold in slime dams.
	Ekhurhuleni LM	Priority: Revitalisation of degraded mining land;
	Frances Baard DM (Kimberley area)	Rehabilitate mine dumps in DMA area
	Kagalagadi DM (Kuruman area)	Rehabilitation of all the mines with a RPI value above 35 within the next 5 years. Rehabilitation of roads polluted with Asbestos.
	Lesedi LM (Heidelberg)	The Lesedi area has very limited mining activity, and is therefore fortunate, compared to the rest of Gauteng, in terms of mining environmental degradation. A few slimes dams and mine dumps however still exist and action must be put in place to rehabilitate such areas. Mining companies should be targeted to re-instate such areas.
	Merafong LM (Carletonville)	The impact of mining development as well known, namely sinkholes due to dewatering, bumps, environmental impact, influx of illegal immigrants, a high unemployment rate due to cutbacks in mining employment. The formation of sinkholes impacted seriously on the future of development of Merafong City especially during the seventies and early eighties. This impact has never really been overcome. Environmental degradation: <ul style="list-style-type: none"> <li>- Sink holes</li> <li>- Tremors</li> <li>- Dolomitic influences</li> <li>- Structural defects due to mining activities.</li> </ul>
	Mogale City (Magaliesburg)	Limited commitment from Mining Houses who operated marginalized mines to spend money on environmental mitigation measures
	Thabazimbi LM	Rehabilitation of Mining areas
	Nama Khoi LM (Springbok)	Mynbou is en was 'n inherente deel van die ekonomiese aktiwiteit. Rehabilitasie was nie 'n prioriteit nie en het dus groot letsels gelaat in die gebied. Afvalhope is orals sigbaar. Hoits myn se skagtoring is verwyder, en insinking (sink gate) hou 'n potensiele gevaar in vir die hoofroete tussen Pofadder en Springbok. Dit is noodsaaklik om die skade wat voorheen aan die omgewing aangerig is te herstel, om toe te sien dat 'n Omgewings Bestuursprogram in plek kom by elke mynbou en prospekter aktiwiteit. Die stelselmatige herstel van voorheen versteurde omgewings moet aangespreek word in toekomstige begrotings, plaaslik en provinsiaal, en dat verdere ekonomiese ontwikkeling moet harmonie met die omgewing plaasvind.

Environmental management in mining operations	Ditsobotla LM	The concentration of the mining activities, specifically relating to small scale Diamond-mining activities and the cement factories within the area is mainly concentrated in the areas north of Lichtenburg. Specific focus should be placed on sound environmental management procedures within this area.
	Ekhurhuleni Metro	Environmental challenges: Mining Belt area and the implications thereof e.g. air pollution, rehabilitation of mines.
	Kgalagadi DM	The existing mining activities in our area are considered as the greatest impact and threat to the environment. These activities are however very well managed and controlled and due to its economic benefits to the area, generally seen as a benefit. All expansion of mines in the Kgalagadi area must undergo intensive environmental impact assessments, trying to limit the effect on the environment.
	Lejweleputswa DM (Welko area)	To ensure proper mine waste management.
	Masilonyana LM (Winburg area)	Inadequate rehabilitation of mine dumps - Pollution caused by dust - Water pollution - Silk dams - Loss of biodiversity - Soil erosion Pollution of drainage systems and dams.
	Mogale City LM	Unclean, unsafe and unhealthy environment for all who lives, work and relax in the zone of impact of these mining activities. Mining related activities cause a plume of radio-active pollution in river systems, and via dust fallout; Radon gasses are also present. Damage of health for both citizens and visitors. Loss of Mogale City's Environmental strengths/Biodiversity. <ul style="list-style-type: none"> <li>• Severe dust &amp; water pollution emanates from slimes dams &amp; derelict sand dumps;</li> <li>• Limited commitment from Mining Houses who operated marginalized mines to spend money on environmental mitigation measures</li> <li>• EMPR not properly enforced and monitored by DME (limited jurisdiction is given to Local Municipalities) – due to limited resources.</li> <li>• A rise in the water table is experience within the Western Mining Basin – potentially affect all water resources adjacent to the mining belt;</li> <li>• Air-Pollution</li> <li>• Mine Dumps that are not rehabilitated</li> <li>• Mining waste</li> <li>• Slime dams that are not monitored being by land owners and by MCLM (owners bankrupt and not traceable)</li> </ul> Strategies: <ul style="list-style-type: none"> <li>• Link with DME on enforcement of EMPRs and requirements of the Mineral Act – assist in monitoring and reporting to DME</li> <li>• Apply pressure on Harmony Gold Mine, DME &amp; DWAF to reveal latest information on Amanzi and status quo w.r.t. the rise of the water table in the Western basin;</li> <li>• Compile and agree on a pollution monitoring programme – linked with DME, DWAF &amp; GDACEL</li> </ul>
	Randfontein LM	Minimizing dust pollution from mine dumps, affected by Harmony Gold Mine. When the wind blows, the whole of Greenhills is covered with mining dust, which causes sinus- and lung problems. <ul style="list-style-type: none"> <li>• Grassing on top will be the first establishing phase. The side will follow after successful establishment of grassing on top.</li> <li>• Rehabilitation of mining land</li> </ul> De-watering of mining compartments in terms of dangerous dolomitic conditions. Rehabilitation of mining land and land slide areas;
	Thabazimbi LM	Danger of pollution by Mines, although well monitored
Environmental planning	Bojanala Platinum DM	To conduct a Strategic Environmental Assessment (SEA) of the entire BPDM area in line with the National Environmental Act (NEMA) principles which will result in the defining and mapping of sensitive environmental areas in the District. This will be done to streamline the process of environmental assessments and to assist under capacitated municipalities in environmental management matters. <p>One of the goals is to classify the open spaces of the study area according to its ecological sensitivity, conservation potential, tourism potential, agricultural</p>

		potential, mining potential, development potential, recreation potential etc. an attempt to create a continuous open space network as a form giving element for the study area and to promote sustainable development.
	Madibeng LM	The single most serious threat to the environment of Madibeng is mining expansion, particularly opencast mining. The impact of mining is not only limited to the ecosystems it destroys, but also to the aesthetic value of the environment. Madibeng has an aesthetic value with a strong tourism potential, one that should be weighed against the value generated by mining. While mining may create unparalleled employment opportunities and revenue over the short term, in the long run Madibeng may find a loss in revenue and employment opportunities due to the weakening of the tourism industry due to an impoverished environment.
	Westonaria LM	No comprehensive environmental database is available for the entire study area. Environmental Management Programmes were however prepared for areas under management of mines. Several sites dating back to the late iron age and historic periods are located within the properties of Venterspost, Libanon, Leeudoorn and Kloof Mines, and the necessary steps must be taken to protect these sites.
	Mogale City LM	Establishment Of Environmental Co-Operative Agreements with Mining Houses and relevant Stakeholders
Environmental health	Kgalagadi DM	Develop and implement an awareness campaign amongst the communities about asbestos, its effects, rehabilitation programs, pre-cautions, myths etc.

**Table 12: Company reports: Environmental issues**

Issue	Sample of mines	Issues reflected in company reports
Community-based projects	Anglo Platinum	Environmental awareness facilitators, community-based nurseries, woodlots – Sekhukhuneland – Centre of Plant Endemism Environmental co-ordinators in all business units and Environmental Management Programme Reports
	BHP Billiton	Zululand Schools Conservation Project (Hillside)
	Lonmin	Representation on Catchment Management Associations North West Eco Forum
Environment management of work operations	Anglo Platinum	Energy efficiency targets Pollution monitoring
	Kumba	Environmental management plans
	BHP Billiton	Water recycling, Optimum Colliery Reducing dust, Douglas Colliery Recycling of hazardous manganese sludge into pellets that can be made into manganese alloys (winner of BHP Billiton environmental award), Metalloys, Meyerton
Scientific support	Anglo Platinum	Translocation of rare and endangered botanical plants Biodiversity strategy
	BHP Billiton	Establishment of West Coast Fossil Park
	Lonmin	Lantana eradication programme Co-operation with Operation Wildflower
Rehabilitation	Anglo Platinum	Contributions to Platinum Producers Environmental Trust – for mine closure
	Kumba	Rehabilitation of Hlobane and Durnacol Colliers in KZN

**Table 13: Municipal IDPs: Traditional issues**

Issue	Sample of municipalities	Issues reflected in IDPs
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Rural development	Central DM	Initial steps have already been taken to involve local Traditional Leadership and other related communities within the programme to promote new small and medium-sized commercial operations.
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**Table 14: Company reports: Traditional issues**

Issue	Sample of mines	Issues reflected in company reports
Cultural identity	Anglo Platinum	Recognition of unique cultural identity of local communities
Rural development	Lonmin	Projects in migrants' home communities – Eastern Cape, Lesotho, Mozambique Rural Development Committee with NUM and TEBA – Homebased care programme, agriculture and small business projects, infrastructure at schools

**Table 15: Municipal IDPs: Coping with closure**

Issue	Sample of municipalities	Possible involvement of mines, as reflected in IDP
	Matjhabeng LM (Welkom)	<ul style="list-style-type: none"> <li>• Acquiring redundant mining assets</li> <li>• Social plan to support people during down scaling of Mining industry.</li> <li>• Use of defunct mining infrastructure for alternative projects – committee already in place</li> <li>• Vista University can expand by using existing redundant Mining facilities</li> <li>• Redundant Mining Facilities: investigate the use, in partnership with stakeholders, redundant facilities for economic development and social needs.</li> </ul>
	Masilonyana	<p>Various options are available:</p> <ul style="list-style-type: none"> <li>• Gold reserves still available</li> <li>• - Jewelry industry</li> <li>• - Tourism opportunities</li> <li>• - Small mining opportunities</li> <li>• - Job creation potential in rehabilitating old mines</li> <li>• - Job opportunities for the historically disadvantaged communities</li> <li>• - Privatization of services (food services, club)</li> <li>• - Availability of unused infrastructure (buildings)</li> </ul>
	Zululand DM	<p>Attention needs to be directed to the remaining large operational mine located near Nqulwane in Ulundi Local Municipality as it is facing closure at some time in the future (either short or medium term). Steps need to be taken to develop an alternative economic base in the area as a large number of people and households depend upon it for their livelihoods.</p> <p><i>Project: Mining towns rehabilitation plan:</i> The purpose of this strategic plan is to identify the processes of change being experienced by the mining towns in Zululand following closure of most mines; to identify any opportunities for rehabilitation; and to identify the steps to be taken to avert (or reverse) their decline. This plan will have environmental, spatial, institutional, economic and poverty relief implications.</p>



## 10 APPENDIX C: A BRIEF OVERVIEW OF LITERATURE ON MINING COMMUNITIES: AUSTRALIA, CANADA AND SOUTH AFRICA COMPARED

**Methodology:** This comparative overview is not an exhaustive one, and is meant to be illustrative only. It excludes academic or scholarly articles in journals and books, as well as travelogues and pre-20<sup>th</sup> Century history. It was drawn from one web-based book dealer ([www.abebooks.com](http://www.abebooks.com)).

A search was done on the following keywords: Australia, Canada and South Africa, in combination with:

- mining-communities
- mines-closing
- mines-closure
- mines-social
- mines-closure.

The overview shows the dearth of books on mining communities in South Africa (with rare exceptions, such as Benoni and Kleinsee). In the published literature, mining has been dealt with primarily at the macro-economic level, as contributing to racial segregation, apartheid, and migrant labour.

### 1. Australia

#### 1. **Aborigines and Diamond Mining: The Politics of Resource Development in the East Kimberley Western Australia** (ISBN:0855643021)

**Dixon, R A and Dillon, M C (editors)**

Nedlands: University of Western Australia Press, 1990. This book is a collection of multi-disciplinary papers examining the complex issues raised by the impact of the development of the Argyle diamond mine in northwest Australia on the local Aboriginal communities. Interesting involvement of De Beers

#### 2. **Dennis, Norman; Henriques, Fernando and Slaughter, Clifford**

Sydney, N.S.W., Australia: Tavistock Publications, Limited, 1956.

#### 3. **ONE DAY IN COLLIE.** (ISBN:0959506705)

**Williams, H.W.:** Regional history of the coal-mining town.

Collie, Shire of Collie, (1979)

".. this history is to record the trials, tribulations and successes of a mining and timber community, who overcame their adversities with hard work, courage and determination"

#### 4. **WALHALLA HEYDAY [Australia],**

**G F James & C G Lee**

Graham Publications, Walhalla, 1975.

Walhalla is one of Victoria [Australia's] surviving gold ghost towns - but a thriving tourist attraction, high in the Victorian Alps. This book is devoted to Walhalla at its gold-rush best, and is an excellent pictorial account of the gold-seekers, the township at its busiest, the difficulties of hauling supplies to maintain the search, and community activities.

#### 6. **Disconcerting Issue : Meaning and Struggle in a Resettled Pacific Community (Symbolic Anthropology Ser.)** (ISBN:0226757501)

**Silverman, Martin G.; Crabb, David W. (editor)**

Chicago, IL, U.S.A.: University of Chicago Press, 1971

A study of cultural change in the Banaban society occasioned by displacement due to phosphate mining.

#### 7. **MITTA MITTA; From the Early Pioneer Days.**

**COLQUHOUN, S.A.**

Mitta Mitta, Victoria, 1953.

History of the the former Victorian mining town, now part of a farming community

**8. COBAR COPPER CENTENARY 1869-1969.**

**MILLER, M. J. and M. D. I., eds.**

Dubbo. Cobar Copper Centenary Celebrations Committee. 1st ed. [1970?].

The history of the tiny mining community just this side of Bourke in New South Wales

**9. The Coalminers of New South Wales. A History of the Union, 1860 - 1960**

**Gollan, Robin**

(Victoria) (1963): Melbourne University Press with The Australian National University

An important study of the Union of a small and isolated community of miners that endured severe working conditions.

**10. THE HISTORY OF THE SHIRE OF KORUMBURRA {Australia},**

**Joseph White**

Shire of Korumburra, Victoria, Australia, n.d. (1988).

The Shire of Korumburra is in Gippsland, some 100kms south-east of Melbourne, and this account of its history spans 94 years and was written by a descendant of a pioneer local family. It covers many towns (Poowong, Loch, Jeetho, Bena, Nyora, Jumbunna, Outtrim, etc), and community activities - churches, coal mining, schools, service clubs, coal mining, racing clubs, hospitals, hotels, railways, fire brigades, scouts and guides.

**11. WIK, MINING AND ABORIGINES,**

**Paul Kauffman**

Allen & Unwin, St Leonards, Sydney, 1998,

Australia's mining industry contributes more than \$36 billion to Australia's export earnings - much of which comes from land under Aboriginal custodianship. Across the continent and in different languages Aboriginal people say: 'The land is my mother'. Conducting business with Aboriginal communities must take this into account. This book surveys the successful collaboration which can occur once mutual understanding is reached.

**12. A Poor Man's Diggings: Mining and Community at Bethanga, Victoria 1875-1912 (ISBN:0947062092)**

**Philipp, June**

Melbourne, VIC, Australia: Hyland House, 1987

**13. NOONKANBAH. Whose Land, Whose Law.**

**HAWKE, Steve & GALLAGHER, Michael.**

Fremantle, WA. Fremantle Arts Ctr. 1989

In 1976 an Aboriginal community returned to Noonkanbah Station in Australia's far north-west as the new owners. But the people's return coincided with an exploration boom that saw their land overrun by miners & blanketed by mineral claims. However, rather than accept this invasion, the people decided to fight for their land.

**14. Digger (ISBN:0330492004)**

**Anderson, Max**

Picador, 2004. Trade Paperback

A funny, thoughtful tale of one man's obsession with finding gold amidst the crazy miners, forgotten communities, mosquitoes and dust of the Australian outback.

**15. DUNOLLY: THE STORY OF AN OLD GOLD-DIGGINGS TOWN.**

**Flett, James.**

1956 Poppet Head (Australia).

**16. At the Coalface the Human Face of Coal Miners and Their Communities: An Oral history of the Early Days**

**Moore Fred, Gorman Paddy, Harrison Ray**

Sydney: CFMEU, 1998.

The first volume in a series based on the oral history collection. It features profiles of 12 coal mining personalities telling their own stories of struggle and survival of courage and determination, of tragedy and triumph and of never

giving up, even in the face of the most daunting challenges. They are stories told with compelling honesty, humour and wit about people and communities that survived in the most hazardous industry in the world, coal mining.

**17. THE STORY OF THE 'MONSTER MINE'. The Burry Burra Mine and its Townships 1845-1877.** (ISBN:0858640937)

**Auhl, Ian:**

(Hawthorndene), Investigator Press, (1986).

"The Story of the 'Monster Mine' and of the growth of its townships 'in the wilderness' and along the 'copper roads', is both a story and an interpretation of an isolated mining community which gave South Australia its first great economic boost and led to the search for minerals in Australia" (d/w blurb).

**18. Social Approaches to an Industrial Past**

**Knapp A Bernard, Pigott Vincent C, Herbert Eugenia W:**

London: Routledge, 1998. First edition

The Archaeology and Anthropology of Mining. A book which addresses the social context of mining communities, including an attempt to integrate archaeological, historical and anthropological approaches.

**19. A NEW APPROACH TO POLICY EVALUATION Mining and indigenous people** (ISBN:0754622770)

**O'Faircheallaigh, Ciaran**

Dartmouth 2002.

**20. The Beacon Mines**

**ENGLAND, GEORGE**

The story of the discovery of Taylor's Reward and Perseverance Reefs, in Upper Bucca Bucca and the Orara Gold Fields.

**21. Essays on Mining in Australia** (ISBN:0702217522)

**Richmond, W. H.**

St Lucia, QLD, Australia: University of Queensland Press, 1983.

**22. Timber for Gold: Life on the Goldfields Woodlines** (ISBN:1863681973)

**Bill Bunbury**

Fremantle Arts Centre Press, 1997.

**23. Dilemmas of Development: The Social and Economic Impact of the Porgera Gold Mine 1989-1994** (ISBN:0731536061)

**Filer, Colin (ed)**

Canberra, ACT, Australia: Asia Pacific Press, 1999.

**24. Gold At Peak Hill** (ISBN:0859051536)

**Heydon, P R**

Western Australia Hesperian Press 1991.

Final in a trilogy of the Murchison Goldfields of Western Australia, social history,

**25. Silver, Sin, and Sixpenny Ale: A Social History of Broken Hill 1883-1921** (ISBN:0522841414)

**KENNEDY, Brian**

Melbourne University Press, Melbourne, 1978

**26. Gold and Typhoid : Two Fevers: A Social History of Western Australia 1891-1900**

**Whittington, Vera**

Crawley, W.A., Australia: University of Western Australia Press, 1990.

**27. Colliery Closure and Social Change A Study of a South Wales Mining Valley**

**SEWEL John**

Cardiff: University of Wales Press, 1975.

**2. Canada**

**1. Yellowknife (ISBN:0887780911)**

**Price, Ray**

Toronto, Canada: Peter Martin Associated Limited, 1974.

The detailed founding and heritage of the community of Yellowknife, located in the remote and rugged Northwest Territories of Canada. Mining, his tory, boom years, settlement, notable events and personalities, commerce,

**2. Mining Communities: Hard Lessons For The Future, Proceedings No. 14**

**Queen's University**

Kingston, ON, Canada: Centre for Resource Studies, 1984.

**3. Banking on Coal : Perspectives on a Cape Breton Community Within an International Context (ISBN:0920336884)**

**Campbell, Douglas F.**

Sydney, NS, Canada: University College of Cape Breton Press, Incorporated, 1997.

**4. Large Mines and the Community: Socioeconomic and Environmental Effects in Latin America, Canada, and Spain (ISBN:0889369496)**

**McMahon, Gary.; Remy, Felix., eds.**

World Bank, Washington, DC. / International Development Research Centre, Canada. 2001.

**5. WHEN COAL WAS KING: Ladysmith and the Coal-Mining Industry On Vancouver Island (ISBN:0774809361)**

**Hinde, John R.**

Vancouver, B.C.: UBC Press, 2003.

This book "illuminates the origins of the 1912-14 strike by examining the development of the coal industry on Vancouver Island, the founding of Ladysmith, and experience of work and safety in the mines, the process of political and economic mobilization, and these factors contributed to the development and identity and community."

**6. We Lived a Life and Then Some: The Life, Death, and Life of a Mining Town (ISBN:1896357067)**

**Angus, Charlie; Griffin, Brit**

Toronto: Between the Lines, 1996.

A history of the mining community of Cobalt, Ontario

**7. Writing off the Rural West : Globalization, Governments and the Transformation of Rural Communities (ISBN:0888643780)**

**Epp, Roger Ivan (editor); Whitson, David (editor)**

The University of Alberta Press, 2001.

Despite a booming world economy, rural communities -- and the people who work in natural-resource industries like farming, forestry, mining or fishing -- have been hard hit by recent international trade agreements.

**8. Memories of Maryville.**

**McClure, Willa.**

Community and area history of this B.C. mining and smelter town.

**9. The Planned Non-Permanent Community. An Approach to Development of New Towns Based on Mining Activity**

**Parker, V. J.**

Ottawa: Department of Northern Affairs and National Resources, 1963

**10. THE FIRST 75 YEARS: A Headline History of Sudbury Canada**

**Dorian , Charles**

Ilfracombe, Devon: Arthur H. Stockwell.

A chronological history of Sudbury and surrounding communities,

**11. Of Mines and Men**

**Taylor-Morell, Marjorie**

Minto: privately published, 1981

A history of the small coal-mining community of Minto, New Brunswick, Canada.

**12. People & Land in Northern Manitoba: 1990 Conference at the University of Manitoba**

**Lithman, Yngve Georg, Rick R. Riewe, Raymond E. Wiest and Robert E. Wrigley**

Winnipeg: University of Manitoba Press. University of Manitoba Press 1992.

Its themes include economics, the romanticism of the North, the cultural revitalization of Native communities, the fate of the boreal forest, civic developments in mining towns and northern wildlife.

**13. Risk Taking in Canadian Mining**

**Carrington, John**

Toronto, Ontario, Canada: Pitt Publishing Company Limited, 1980

The people who found the mines that made Canada one of the world leaders in mineral discovery were a community onto themselves

**14. The Company Store: James Bryson McLachlan and the Cape Breton Coal Miners Strike 1900-1925 (ISBN:0385128126)**

**Mellor, John**

Toronto, Canada: Doubleday, 1983.

The story of one of Canada's bitterest strikes - the coal miners of Cape Breton coal miners, their families and their communities rebelling against the feudal system they lived in and worked under

**15. Voices from Wollaston Lake - Resistance Against Uranium Mining and Genocide in Northern Saskatchewan (ISBN:907070207X)**

**Goldstick, Miles**

Canada: Earth Embassy/Wise, 1987.

Northern people's own statements and the problems of uranium mining.

**16. Packsack Mines Limited Reports, Maps and Plans**

**Shannon, J.D.**

1940.

This constitutes a complete picture of a gold mining enterprise in Manitoba's Rice Lake area.

**17. The Gold Crusades: A Social History of Gold Rushes,1849-1929 (ISBN:0771592876)**

**Fetherling, Douglas**

Macmillan of Canada, 1988

**18. Contested Countryside - Rural Workers and Modern Society in Atlantic Canada from 1800 to 1950 - illustrated with B&W map - farming , forestry , fishing , coal mining - 4th book in the Gorsebrook series on the political economy of the Atlantic Region (ISBN:0919107400)**

**Samson, Daniel ed.**

**19. Rogue Diamonds : Northern Riches, Dene Rights (ISBN:1550549502)**

**Bielawski, Ellen**

Vancouver, BC, Canada: Douglas & McIntyre, Limited, 2003.



**20. ALBERTA MINERS: A Tribute (ISBN:0969702302)**

**Christmas, Lawrence**

Calgary, AB, Canada: Cambria Publishing, 1993.

Documents more than 300 mining people in 80 Alberta locations including 40 operating mines. Accompanying biographical and historical stories recorded in interviews.

**21. Little Communities and Big Industries**

**Roy T. Bowles**

Butterworths, Toronto, 1981.

**South Africa**

**1. Letting Them Die: Why HIV/AIDS Prevention Programmes Fail (ISBN:0253216354)**

**Campbell, Catherine**

Published Aug 2003, Indiana University Press.

Today in South Africa, HIV/AIDS kills about 5 in 10 young people. Many of the victims are miners and commercial sex workers who ply their trade in mining communities.

**2. Communities in Isolation: Perspectives on Hostels in South Africa. Goldstone Hostel Report, 1993 (ISBN:0796914966)**

**Minnaar, A. (ed.)**

Pretoria: Human Sciences Research Council Institute for Historical Research, 1993.

**3. Going for Gold : Men, Mines and Migration (Perspectives on Southern Africa Ser., Vol. 51)**

**Moodie, T. Dunbar; Ndatshe, Vivienne**

Berkeley, CA, U.S.A.: University of California Press, 1994.

**4. Benoni Son of my Sorrow**

**Humphriss, Deryck and David G. Thomas**

(Benoni, Town Council of Benoni, 1968). The Social, Political and Economic History of a South African Gold Mining Town

**5. IN THE COMPANY OF DIAMONDS De Beers, Kleinzee, and the control of a town (ISBN:0821413783)**

**Carstens, Peter**

Ohio University Press 2001

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