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Volume 1: The Report of the Regional MMSSD Process
Volume 2: The Executive summary of The Report of the Regional MMSSD Process
Volume 3: CD The Report of the Regional MMSSD Process

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The move towards sustainable development in the mining and minerals sector in southern Africa can build on a wealth of experience, knowledge and skills in the sector and the region. The momentum that has been created by the MMSD project must not be allowed to dissipate. If all the stakeholders in the sector bring their strengths to a multistakeholder forum to carry the process forward, the mining and minerals sector can make a real and lasting difference to ensure an equitable dispensation for all aspects of sustainable development - governance, society, economic growth and the environment.

1. Introduction

The Mining, Minerals and Sustainable Development (MMSD) project is an independent process of multistakeholder engagement and participatory analysis that seeks to address every aspect of the interface between the mining and minerals sector and the concept of sustainable development. The aim of MMSD is to "identify how the mining and minerals sector can best contribute to the global transition to sustainable development".

MMSD is a two-year project that began in April 2000. The project should result in the creation of structures capable of being carried forward after its completion.

To promote co-operation and reconcile divergent views, MMSD is involved in regional processes in the world’s major mineral producing and consuming regions. These include southern Africa, Latin America, Australia and North America. Scoping studies are being conducted in Southeast Asia, the former Soviet Union and Europe. These regional MMSD processes are crucial components of the project. Stakeholders in each of the regions are drawn from NGOs, academia, governments, private companies, organised labour, trade organisations, co-operatives, regional agencies and international organisations. Each region is engaged in scoping issues and identifying what institutional framework could be

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Schneider, G. (2001), pers. comm., Tel: +264-61-208-5111 (Windhoek, Namibia) Fax: +264-61-249-144, e-mail: director@mme.gov.na


World Bank (2001), World Development Indicators, World Bank.

MMSD aims to build ongoing networks of stakeholders and regional governance that will last beyond the lifetime of the project.

The MMSD project comprises two components: research and stakeholder consultation. These components are interactive and complementary – the regional issues to be researched were identified by the stakeholders, and the resulting research reports, in turn, reflect the priorities of the stakeholders. Recommendations for implementation have been developed in collaboration with stakeholders.

In November 2000, at a Multistakeholder Meeting in Johannesburg, stakeholders identified five key areas for research. A sixth research report, a baseline study of the industry, was commissioned and funded directly by the global MMSD project.

The five research topics identified by stakeholders are:

1. Small scale mining and sustainable development in southern Africa (RT1),
2. HIV/AIDS, the mining and minerals sector and sustainable development in southern Africa (RT2),
3. Social issues within the mining and minerals sector in southern Africa (RT3),
4. Mining, minerals, the biophysical environment and the transition to sustainable development in southern Africa (RT4), and
5. Mining, minerals, economic development and the transition to sustainable development in southern Africa (RT5).

REFERENCES


At a second multi-stakeholder meeting, held in Johannesburg on 18/19 September 2001, stakeholders reviewed the results of the research component. Recommendations from the research reports were prioritised for implementation by stakeholders at this meeting. These recommendations are contained in the regional report, which was circulated to stakeholders in draft form for further comment and refinement.

Stakeholders identified certain overarching issues that have to be addressed if progress towards sustainable development is to be achieved. These priorities appear as crosscutting issues in the recommendations. The critical issues in the region are:
- poverty alleviation,
- capacity building and skills training,
- gender equity,
- job creation, and
- governance.

Stakeholder consultation was undertaken to ensure that the report reflects the views of as many of the stakeholders in the mining and minerals sector in southern Africa as possible. Political conditions in Angola and the Democratic Republic of

References


Murangari, D. (2001), pers. comm., e-mail: chamines@africaonline.co.zw


RT1 ITDG (2001), Small scale mining & sustainable development within the SADC region, MMSD SOUTHERN AFRICA Report on Research Topic 1, ed B. Dreschler, ITDG, August, 204 pp. (included on accompanying CD).

Recommendation 38: governments and SADC align national and regional policies, legislation and government administration models with the goals of sustainable minerals and mining development for the region.

Recommendation 39: to ensure that sustainable land-use is possible once mining has ceased, governments, in consultation with key stakeholders, determine the end land-use prior to mining authorisation.

Recommendation 40: best practice international accounting standards are used to develop guidelines for a system of valuation standards which reflect natural capital and the associated development costs in the systems of national accounts for the region.

Recommendation 41: all companies produce sustainability reports as part of their annual financial report, and global companies provide statistics on a country by country basis for the southern African region.

Recommendation 42: a high-level multi-stakeholder forum is established to implement the recommendations of this report.

Congo prevented effective engagement with stakeholders in these countries.

The Steering Committee of MMSD SOUTHERN AFRICA, representative of key stakeholder groups from across the region, was elected at the MMSD Multi-stakeholder Meeting held in Johannesburg in November 2000. The role of this committee is to:
- provide general advice and support to the Working Group,
- peer review the outputs of the Working Group, and assure the quality of such outputs, and
- engage with stakeholders in their constituencies.

The Steering Committee advised and guided IIED in the selection and appointment of the MMSD SOUTHERN AFRICA Working Group.

To further ensure that the process was a regional one, and that the research results reflected views from the different southern African countries, emphasis was placed on appointing researchers from across the region. Figure 2 shows the countries of the region and indicates the level of participation.

Figure 2: The southern African region as defined for the MMSD project showing participation in the project.
Recommendation 33: SADC governments harmonize their legislation and database compilation to optimise the management of environmental impacts and to minimize disputes over shared natural resources.

Recommendation 34: companies and regulatory authorities adopt policies that effectively reduce the negative impacts of seepage on the environment and minimize water loss and water use.

Recommendation 35: governments and companies ensure that early consultation with stakeholders occurs and that consensus is reached on how benefits and costs are to be shared.

Recommendation 36: governments adopt policies aimed at creating an enabling environment for job creation in large- and small-scale mining and minerals industries, and introduce specific incentives and support mechanisms to encourage and marry agricultural and small-scale mining activities in rural areas.

Recommendation 37: the geoscience organisations in the various southern African states accelerate the current endeavour to establish a common geological database for the region and extend the information system to include information that will facilitate greater stakeholder engagement.

Stakeholder engagement and consultation informed all the activities of the MMSD SOUTHERN AFRICA initiative. Southern Africa is a vast region, and to engage satisfactorily with all stakeholders in a short space of time was not possible. Nonetheless, MMSD SOUTHERN AFRICA now communicates regularly with over one thousand individuals and organisations. A continuous flow of information has been one of the success factors of the stakeholder engagement process.

In addition to the above, MMSD SOUTHERN AFRICA conducted numerous workshops and focus group meetings in a number of countries in the region. The issues raised at these meetings correlated closely with the issues identified in the research reports.
‘Southern Africa’ refers to that group of states extending from South Africa north to the Democratic Republic of Congo (DRC). The term encompasses Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Zambia and Zimbabwe (Figure 2). Mauritius and Seychelles were not included because little or no mining takes place in these island states.

The mining and minerals sector has played a significant role in the development of the southern African region, and is in a unique position to take the lead in the region’s progress towards sustainable development.

In the last quarter of the nineteenth century southern Africa experienced a mineral revolution. The large-scale mining of high value commodities, first diamonds and then gold, launched the region into industrialisation and paved the way for the emergence of a modern capitalist economy.

The minerals revolution had an immediate impact on the regional economy. It stimulated a demand for coal mining, as well as for engineers and a broad range of other professional skills. Mining towns created new markets, and railways linked the interior to the ports. A local commercial community emerged and, to a lesser degree, secondary industry.

The effects of development in the minerals sector were not all positive. In South Africa, for example, patterns of labour and economic development, based on racial lines, were reinforced. The colour bar, migratory labour and the mine hostel system became an integral part of the exploitation of minerals. From 1975, these inequities were addressed as South Africa progressed steadily towards the extension of labour rights to all, and in 1994 the first democratic elections ended formal restrictions on franchise and employment.

There has been progress in the advancement of some black workers into skilled jobs and there has been some stabilisation...
of a portion of the workforce on a permanently urbanised basis. The essential migratory quality of the mine labour system remains and seems unlikely to disappear soon.

Southern African countries have been significant global players in the exploitation of minerals for most of the last century. South Africa’s share of global gold production peaked in 1970, but steadily declined thereafter. In terms of Gross Domestic Product (GDP), mining (with gold mining as the most valuable component), remained the sector producing the largest share of the country’s wealth until the 1960s.

In 1890 Zimbabwe was colonised by Rhodes’ Pioneer Column. Many small deposits were found, and the diverse mining of small deposits has remained a feature of that country’s mining industry.

Large-scale mining in the Zambian Copperbelt commenced in the 1930s. Copperbelt operations were managed privately until after independence in 1964, when they were nationalised. Continued decline in copper prices and a lack of reinvestment in mining infrastructure resulted in decreasing production, and privatisation, which was necessary to save the mines, began in 1993.

Enabling and investor-friendly policies ensured that the mining and minerals sector developed rapidly in Tanzania in the 1990s. Tanzania is thought to have the largest gold reserves in southern Africa after South Africa and in 1999 this sector grew by 27 per cent. It is likely that Tanzania will be producing more than 1,500,000 ounces by the middle of this decade (Mbendi 2001).

The following minerals and metals have been of major importance in the history of mining development in southern Africa: chromium, coal, cobalt, copper, diamonds, gold, iron, manganese, nickel, phosphates, platinum-group metals (PGMs), semi-precious stones, lead, zinc and titanium. Over 60 minerals are mined in the SADC region and exported to more than 100 countries worldwide.

Recommendation 23: where appropriate, companies, in partnership with communities, identify and address development opportunities and constraints in local communities by means of technical and financial support and outsourcing.

Recommendation 24: governments establish incentives for companies to promote local social development and all stakeholders co-operate to clearly define responsibilities and objectives in local development initiatives.

Recommendation 25: governments establish stakeholder fora, guided by planning frameworks, to direct privatisation and restructuring and to implement social impact assessment and post-implementation monitoring of a social fund.

Recommendation 26: companies ensure that their community consultation policies are broad-based enough to include women as a stakeholder group in their own right so that their concerns are given fair weighting.

Recommendation 27: companies, NGOs, governments and the community itself ensure that women have an equitable opportunity to share in the benefits accruing to the community, whether these are local development initiatives, employment opportunities or skills development.
The operating context for the mining and minerals sector in southern Africa is a daunting one. The region has abundant mineral resources, but limited food production potential and water availability. Severe poverty, poor governance and social inequities prevail, and currently pose immense challenges for sustainable development. Mining and minerals processing provides a unique opportunity for developing the human capital of the region and ensuring economic stability. Such developments have an ecological price, and the wealth generated must be used, not only to bolster economic and social systems, but also to minimise environmental damage.

Systems of government in the region are diverse, ranging from liberal democracies, with devolution of power to local levels, to authoritarian states. Conflict and extreme instability make characterisation of the system of government in some countries difficult. A lack of capacity to implement policy is a characteristic of governments throughout the region.

Governance

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The New Partnership for Africa's Development (NEPAD)

This widely supported initiative recognises that sustainable development can only occur when good governance and a lack of corruption underpin progress.

Article 71 of NEPAD states: African leaders have learnt from their own experiences that peace, security, democracy, good governance, human rights and sound economic management are conditions for sustainable development. They are making a pledge to work, both individually and collectively, to promote these principles in their countries, sub-regions and the continent (Government Communications 2001, p 16).

Recommendation 19: companies institute resettlement policies which are formulated in close consultation with the affected communities and which ensure that the disruption of the livelihoods and development of individuals and communities is minimised.

Recommendation 20: if resettlement is unavoidable, companies determine whether there are national guidelines for resettlement and, where no guidelines exist, use the following guidelines:
1) World Bank Report OD430 and
2) the report of the World Commission on Dams.

Recommendation 21: to guide resettlement, governments develop guidelines and legislation, implemented in partnership with companies, that are used to support integrated social development plans, and are flexible and include sufficient economic data for decision making.

Recommendation 22: stakeholders, particularly companies, government and NGOs, through consultation, capacity building, information sharing and, where possible, joint decision-making, ensure that the surrounding community is fully informed of, and involved in, any developments which affect it.
Sustainable development is at the core of this initiative and it will be important that synergies be explored between MMSD and NEPAD in the implementation of MMSD recommendations in Africa.

Economic Development
Today, despite recent adverse economic features and depressed commodity prices for many metals and mineral products, mining and its associated industries continue to form the cornerstone of the economies of most southern African countries. The mining industry has been pivotal in the development of infrastructure and the establishment of manufacturing industries in the region. Manufactured products have been produced in nine SADC countries, mainly in the iron and steel and copper industries.

The role of mining and minerals in the history of the region has been both positive and negative, and it remains so today. To form a complete picture of the way in which mineral wealth contributes to, or detracts from, sustainable development, cognisance should be taken of the extent to which minerals fuel civil wars and undermine governments and economies. Several countries in the region are involved in civil wars which are at least partly funded by proceeds from diamond and base metal sales. This situation is compounded by the high levels of corruption which exist in these countries.

A lack of recent progress in downstream value addition to commodities typifies southern African countries (RT5 MacFarlane). The reason for this lack of progress is identified as business environments that are not conducive to investment in certain areas of minerals beneficiation. The role of government, in this regard, is to create an enabling environment for investment in beneficiation as opposed to one of direct intervention. Governments are now encouraging downstream development of, for example, the jewellery industry. Given that sub-Saharan Africa has almost complete resource integrity, there is considerable opportunity for ensuring the sustainability

Recommendation 14: all stakeholders in the sector develop national HIV/AIDS management programmes in partnership with each other and with international donors and the pharmaceutical industry.

Recommendation 15: women are made less vulnerable to HIV/AIDS infection through economic and educational empowerment, and governments, NGOs and companies support such empowerment.

Recommendation 16: where practical, affordable and supported by residents, the move towards replacing single-sex hostels, which have been identified as one of the critical channels for the transmission of HIV, with family housing units, is accelerated.

Recommendation 17: where feasible and appropriate, stakeholders, especially companies and labour, facilitate the retention of people living with AIDS as productive members of the workforce for as long as possible.

Recommendation 18: all stakeholders, and particularly governments, commit themselves to good governance, so that the HIV/AIDS pandemic can be effectively managed and their people are protected from the escalation of the disease.
The economic benefits attributable to the mining sector are reflected in the contribution to direct foreign exchange earnings as shown in Figure 3. Overall, it is conservatively estimated that mining contributed an average of 40 per cent to the direct foreign exchange earnings of SADC countries in 2000 (Mbendi, 2000; CIA, 2001, both in Hounsome & Ashton, 2001).

![Figure 3: Contribution of mining to GDP, selected countries (source: SADC 2001 in RT5 MacFarlane). * Some authorities consider mining’s direct contribution to Namibia’s GDP to be 15% (Schneider, pers. comm., 2001). ** Figures for Zimbabwe from Murangari (pers. comm., 2001). No data was available for Democratic Republic of Congo.]

Recommendation 10: governments, donors, NGOs and small scale mining associations provide adequate, accessible and affordable schooling and day-care for the children of small scale miners.

Recommendation 11: where appropriate, areas for small scale mining activities are identified within local development planning processes; environmental management and assessment tools, such as strategic environmental assessment and cumulative effects assessment, are applied to determine the operating and rehabilitation guidelines for small scale miners within a framework of sustainable development.

Recommendation 12: government, labour and companies initiate and support development plans aimed at alleviating rural poverty in labour sending areas and making affected rural communities less dependent on income from migrant labour.

Recommendation 13: governments, labour and companies, in cooperation, investigate financially viable programmes to enable workers to join medical benefit schemes so that workers who contract HIV/AIDS are able to receive care without additional financial distress, and government, labour, companies and NGOs initiate and support community home-based care programmes.

HIV/AIDS

The estimates of foreign exchange earnings are likely to be on the conservative side as they exclude the economic contribution made by informal miners to the economies of several countries. Small scale mining is largely a poverty-driven activity, typically practiced in the poorest and most remote rural areas by a largely itinerant, poorly educated populace with few employment alternatives (RT1). This activity is usually wasteful of non-renewable resources and hazardous to
Recommendation 5: education institutions, in partnership with companies and government, develop and offer appropriate training programmes for comprehensive business skills acquisition by small scale miners; and financial institutions (banks, development agencies), government, companies and NGOs facilitate access to credit adapted to the specific requirements of small scale miners.

Recommendation 6: education institutions, in partnership with government, companies and donors, develop and offer appropriate capacity building programmes, information gathering and sharing mechanisms for comprehensive technical skills acquisition by small scale miners.

Recommendation 7: small scale miners’ associations form collaborative partnerships with companies for mutual benefit.

Recommendation 8: associations for women miners use existing instruments, such as the Beijing Platform of Action, the United Nations Convention on the Elimination of All Forms of Discrimination Against Women and the SADC Heads of Government Declaration on Gender, 1997, to lobby government to ensure equal opportunities for women in small scale mining.

Recommendation 9: all governments adopt and monitor the implementation of ILO Convention No.182 and IPEC to ensure the elimination of the worst forms of child labour in mining.

human and environmental health. However, it has the potential to economically empower disadvantaged groups and enrich nations by virtue of its low investment costs and short lag-time from discovery to production. The sector is also able to exploit marginal mineral deposits that are not economically viable for large mining companies (RT1).

Despite the prevailing economic pressures on the mining industry, the mining sector in the twelve mainland SADC countries directly employed 2 million people in 2000. This figure does not include informal miners, except in Tanzania (SADC, 2001).

While these figures do not account for the millions of people dependent on miners’ incomes for their livelihoods, they do emphasize the importance of the mining sector as a source of employment.

The wealth generated by the mining and minerals industry has not always been used to rehabilitate environmental degradation caused by mining nor to benefit the communities affected by the industry. In spite of this history, current trends in the mining and minerals industry indicate that it can contribute to the region’s move towards sustainable development.
Although gender issues were singled out for attention by stakeholders, all the recommendations in this report are intended to benefit all stakeholders, including women.

**Recommendation 1:** small scale miners recognise their role in the economies of the region and commit themselves to cooperation with the other stakeholders in the sector to align small scale mining activities with the principles of sustainable development.

**Recommendation 2:** national governments support the transition of small scale mining to the formal sector through the implementation of policies specifically geared to this sub-sector.

**Recommendation 3:** SADC creates a forum to promote the development of a harmonised regional legal framework to enable the activities of small scale miners to be conducted in an orderly and systematic manner.

**Recommendation 4:** appropriate stakeholders (e.g. donors, Chambers of Mines, NGOs, small scale miners, companies, governments and labour) encourage, facilitate and support the formation of small scale mining associations and co-operatives.

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**5.3 MMSD SOUTHERN AFRICA recommendations.**

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**Small scale mining**

- **4a. Population**
- **4b. Population Growth Rate**
- **4c. Mining Contribution to GDP**
- **4d. Mining Employment**
- **4e. Mining Share of Foreign Earnings**

**Figure 4 a-e:** Summary data for the twelve mainland SADC states showing the relative importance of social and economic contributions made by the mining and minerals processing sector in each country (Hounsome & Ashton, 2001; RT4 Ashton et al.).

Mining contribution to GDP in 1999 including onshore and offshore oil and gas plus diamonds, plus all other formal land-based mining activities.
Development in southern Africa with those in Australia. This comparison highlights the disparity between the mineral wealth of the region and the benefits which accrue to its population. The poverty of many southern African people is in stark contrast to the mineral wealth of the region. A primary opportunity in southern Africa is therefore to utilise this mineral wealth as a catalyst to improve the health, income and living conditions of the poor majority. However, while government should take the lead, governance is not just the responsibility of the state, but of all stakeholders, and the benefits accruing from good governance affect all stakeholders. A healthy and normalised childhood is envisaged in recommendations 9 and 10. Sound governance is needed to address the situation of marginalised and disempowered sectors of the community, such as women (recommendations 26-30), resettled communities (recommendations 19-21) and those infected with HIV/AIDS (recommendations 12, 13, 14 and 16). Good governance promotes regional co-operation in recommendations 33, 37 and 38. Recommendations 32, 33 and 34 aim to protect the natural environment, and this also needs implementation of enabling policies. In recommendations 35 and 36, the equitable distribution of the rents from mineral exploitation is ensured by good governance.

The emphasis on good governance in the recommendations aligns with the principles of NEPAD.

### Gender equity

Recommendations 8, 15, 26, 27, 28, 29

In a region where the majority of the population are poor, women are among the poorest. Culturally, historically and economically they are also disempowered and form a significant marginalised group. The recommendations address all these issues, and, in addition, recommendation 8 urges women to take steps to alleviate their position themselves. The main thrust of the recommendations is the empowerment of women, because equity will flow from this. This empowerment is either educational (recommendations 15 and 28), economic (recommendations 15 and 27), job opportunities (recommendations 27 and 28), or by recognition of their status as legitimate stakeholders (recommendation 26).
The small scale mining sub-sector, which is thought to employ 1.5 million people directly in the region, is characterised by severe poverty, leading to desperation and lawlessness (RT1 ITDG). Women constitute a significant number of small scale miners in the region. They make up an estimated 30 per cent in Zambia and 25 per cent in Tanzania (Hentschel 2001), mainly in subordinate positions and on inequitable terms. Small scale mining poses great social development challenges for the mining and minerals sector and is currently an impediment to the transition to sustainable development.

The mining industry has shaped the lives of women in rural southern Africa for many generations. The important role women play in the rural economy, while the men leave to work on the mines, is a key feature of the mining industry (RT3 Ranchod).

Job creation

Recommendations 5, 6, 23, 27, 28, 36
Unemployment rates throughout the region are high and exacerbate poverty and its attendant ills. The minerals sector, on the one hand, contributes to this situation through resettlement, downscaling, closure and retrenchments. On the other hand, the sector can do much to alleviate the problem. The recommendations envisage job creation through education, by providing opportunities for development in local communities and by stimulating the growth of the small scale mining and agricultural sectors.

Capacity building and skills training

Recommendations 2, 4, 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 20, 21, 22, 23, 24, 26, 27, 28, 29, 31, 32, 33, 35, 36, 37, 40, 41
A lack of skills and capacity is prevalent in the southern African region, and is a challenge in the move towards sustainable development. The recommendations envisage capacity building by a variety of means: education (as in recommendations 5 and 6), government policy (as in recommendations 2, 21 and 35), self-regulation within a stakeholder group (recommendation 7) and consultative and collaborative approaches (recommendations 22 and 32). An imperative in the move to sustainable development is multi-stakeholder co-operation. This is an aspect of the majority of recommendations, and is epitomised in recommendation 14, which proposes co-operation across a broad spectrum of activities by all stakeholders to deal with the threat of HIV/AIDS.

Governance

Recommendations 1, 2, 3, 4, 7, 8, 9, 11, 12, 14, 16, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42
Very few of the recommendations are proposed without the supporting framework of good governance.

If the wealth generated by the mineral sector is to be managed sustainably, and the small scale mining sub-sector, which is thought to employ 1.5 million people directly in the region, is characterised by severe poverty, leading to desperation and lawlessness (RT1 ITDG). Women constitute a significant number of small scale miners in the region. They make up an estimated 30 per cent in Zambia and 25 per cent in Tanzania (Hentschel et al. 2001), mainly in subordinate positions and on inequitable terms. Small scale mining poses great social development challenges for the mining and minerals sector and is currently an impediment to the transition to sustainable development.

The mining industry has shaped the lives of women in rural southern Africa for many generations. The important role women play in the rural economy, while the men leave to work on the mines, is a key feature of the mining industry (RT3 Ranchod).

As a result of the incomes lost through a reduction in the demand for labour, levels of poverty are likely to increase in families and communities that once specialised in exporting male labour.

Positive results have been achieved by multistakeholder initiatives that aim to reduce the impact of retrenchment on communities, especially in labour sending areas.

HIV/AIDS

HIV/AIDS is arguably the most significant threat to sustainable development in southern Africa. A decade ago, HIV/AIDS was regarded primarily as a health crisis. Today it is clear that the disease is a development crisis. The economic implications are dire: loss of productivity, the loss of benefits of education and training and the diversion of resources from investment to health, orphan care and funerals (Chanda, pers. comm. in RT2 Elias et al.).

The HIV/AIDS epidemic occurs within a context of declining living standards across the region. The frequent loss of both parents to AIDS has seen a rapid
increase in the number of AIDS orphans throughout the region, many of whom have no alternative but to live off the street. Health services have been severely affected by economic decline and structural adjustment programmes, and acute shortages of essential drugs are increasingly common (RT2 Elias et al.).

An HIV/AIDS research report by ING Barings concluded that the mining sector will be the most affected component of the South African economy, and that about 27 per cent of mineworkers are likely to die of AIDS in 2005 (Business Day, 28 December 1999, in RT2 Elias et al.).

The mining and minerals industry has been a key player in the fight against HIV/AIDS, providing a substantial proportion (and sometimes almost all) of the initiative and effort in the region (RT2 Elias et al.).

The Biophysical Environment

Diversity of species is a key characteristic of natural ecosystems. These, in turn, form the basis of all ecosystem goods and services upon which sustainable livelihoods and food security depend (Tewary et al., 1996). Historically, the mining sector has not recognised this, and mining activities have often resulted in destruction of, or radical alterations to, whole ecosystems. Current best practice attempts to avoid negative impacts and, where necessary, to restore impacted environments. This is an essential step if the sector is to contribute significantly towards sustainable development in the region.

Historically, as many as half a million hectares of land per year have been directly disturbed by mining across the globe (Young, 1992, in Johnson & Lewis, 1995). The area or “physical footprint” occupied by mine infrastructure is small in comparison to other land uses such as agriculture, but mining-related impacts are usually more intense, and may affect much larger areas due to the dispersal of pollutants through rivers, the atmosphere

6.1 Overarching issues

Section 1 refers to the five overarching issues identified by stakeholders as critical for progress to sustainable development. These issues have not been dealt with in focussed research reports, but appear as crosscutting issues in the six research reports and in the recommendations listed below. A brief guide to the recommendations dealing with each critical issue shows their prevalence in the recommendations. Because these are cross-cutting issues, such a categorisation is to some extent artificial. For example, the recommendations relating to governance would, if implemented, impact on poverty alleviation, job creation, gender equity and capacity building.

A table of the detailed recommendations arising from the MMSD SOUTHERN AFRICA process follows this summary section.

Poverty alleviation

Recommendations 2, 5, 11, 12, 13, 15, 17, 19, 23, 27, 35, 36

In a region where the average daily income is just above US$ 2 per capita, it is to be expected that poverty alleviation is a critical issue. It is notable that no expectations of “hand-outs” were articulated in stakeholder interactions. The most important way in which poverty can be alleviated in the above recommendations is through involvement of all stakeholders. The processes involved include education, policy making and facilitating means of avoiding increased poverty, such as joining medical benefit schemes (recommendation 13). Job creation and capacity building are recommended as means toward poverty alleviation in recommendations 5, 23 and 36, and specific emphasis is placed on the small scale sector of the economy.
It is envisaged that participating stakeholders would identify those aspects in the recommendations where they could help. In a multistakeholder partnership the sharing of resources, facilities and information becomes possible. The capacity lacking in one stakeholder group can be supplemented from another stakeholder group. For example, companies have expertise in financial and project management that can be used to add capacity to CBOs and NGOs. In their turn, CBOs and NGOs have extensive experience in community work, and are perceived as more approachable than government and industry. Communities have undertaken much of the care of AIDS orphans, but they need land and facilities, which government can supply.

The southern African region is rich in natural resources including minerals. However, future regional growth and development may be constrained by the increasing scarcity of one of the most critical resources - fresh water. Water pollution caused by mining activities is a significant problem in several countries in the SADC region.

Figure 6: A possible structure for the implementation of the MMSD SOUTHERN AFRICA recommendations
Sustainable development is not easily defined, nor has any one of the many definitions been generally accepted. The definition that comes closest to general acceptance, and that is also widely familiar, is contained in the Bruntland Report of 1987: sustainable development is “…development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” (World Commission on Environment and Development, 1987).

Because MMSD SOUTHERN AFRICA is primarily concerned with sustainable development in the SADC region, it is appropriate that discussions on progress towards sustainable development are aligned with the SADC vision for sustainable development, which states that the region must:
- accelerate economic growth with greater equity and self-reliance,
- improve the health, income and living conditions of the poor majority,
- ensure equitable and sustainable use of the environment and natural resources for the benefit of present and future generations.

A vision for sustainable development in southern Africa is presented in Figure 5.

The recommendations listed at the end of this summary are neither exhaustive nor prescriptive. They reflect the challenges to progress towards sustainable development by the mining and minerals sector as perceived by stakeholders. These recommendations were prioritised by stakeholders, but further prioritisation will have to be undertaken in the implementation phase by MMSD SOUTHERN AFRICA’S successor organisation. This successor will probably take the form of a multistakeholder forum. It is likely that different implementing agencies and stakeholders will have different priorities. For example, small scale mining is still an emerging issue in South Africa, but is already critical in Zimbabwe and Tanzania. Similarly, water management would be more critical in Namibia than in other southern African countries.

The Regional Report reflects the background to the recommendations. Recommendations have been coded to illustrate how they align with the overall purpose of the MMSD SOUTHERN AFRICA project and address the overarching concerns of the stakeholders.

Recommendation 42 from stakeholders consulted during the MMSD SOUTHERN AFRICA process is that a high-level multi-stakeholder forum be established to implement the recommendations of this report. An outline of a possible structure for guiding this multistakeholder collaboration is shown in Figure 6 overleaf. The next phase of the MMSD SOUTHERN AFRICA process will be to discuss this and other possible mechanisms to enable implementation of the recommendations contained in this report, as well as relevant recommendations from the global MMSD process.

Implementation of the recommendations listed may be achieved through effective multistakeholder collaboration. This would entail commitment to fundraising and the establishment and maintenance of appropriate enabling structures.
Sustainable development is not easily defined, nor has any one of the many definitions been generally accepted. The definition that comes closest to general acceptance, and that is also widely familiar, is contained in the Bruntland Report of 1987: sustainable development is “... development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” (World Commission on Environment and Development, 1987).

Because MMSD SOUTHERN AFRICA is primarily concerned with sustainable development in the SADC region, it is appropriate that discussions on progress towards sustainable development are aligned with the SADC vision for sustainable development, which states that the region must:
- accelerate economic growth with greater equity and self-reliance,
- improve the health, income and living conditions of the poor majority,
- ensure equitable and sustainable use of the environment and natural resources for the benefit of present and future generations.

A vision for sustainable development in southern Africa is presented in Figure 5.

The recommendations listed at the end of this summary are neither exhaustive nor prescriptive. They reflect the challenges to progress towards sustainable development by the mining and minerals sector as perceived by stakeholders. These recommendations were prioritised by stakeholders, but further prioritisation will have to be undertaken in the implementation phase by MMSD SOUTHERN AFRICA’S successor organisation. This successor will probably take the form of a multistakeholder forum. It is likely that different implementing agencies and stakeholders will have different priorities.

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Implementation of the recommendations listed may be achieved through effective multistakeholder collaboration. This would entail commitment to fundraising and the establishment and maintenance of appropriate enabling structures.
It is envisaged that participating stakeholders would identify those aspects in the recommendations where they could help. In a multistakeholder partnership the sharing of resources, facilities and information becomes possible. The capacity lacking in one stakeholder group can be supplemented from another stakeholder group. For example, companies have expertise in financial and project management that can be used to add capacity to CBOs and NGOs. In their turn, CBOs and NGOs have extensive experience in community work, and are perceived as more approachable than government and industry. Communities have undertaken much of the care of AIDS orphans, but they need land and facilities, which government can supply.

The southern African region is rich in natural resources including minerals. However, future regional growth and development may be constrained by the increasing scarcity of one of the most critical resources - fresh water. Water pollution caused by mining activities is a significant problem in several countries in the SADC region.

Figure 6: A possible structure for the implementation of the MMSD SOUTHERN AFRICA recommendations
increase in the number of AIDS orphans throughout the region, many of whom have no alternative but to live off the street. Health services have been severely affected by economic decline and structural adjustment programmes, and acute shortages of essential drugs are increasingly common (RT2 Elias et al.).

An HIV/AIDS research report by ING Barings concluded that the mining sector will be the most affected component of the South African economy, and that about 27 per cent of mineworkers are likely to die of AIDS in 2005 (Business Day, 28 December 1999, in RT2 Elias et al.).

The mining and minerals industry has been a key player in the fight against HIV/AIDS, providing a substantial proportion (and sometimes almost all) of the initiative and effort in the region (RT2 Elias et al.).

**The Biophysical Environment**

Diversity of species is a key characteristic of natural ecosystems. These, in turn, form the basis of all ecosystem goods and services upon which sustainable livelihoods and food security depend (Tewary et al., 1996). Historically, the mining sector has not recognised this, and mining activities have often resulted in destruction of, or radical alterations to, whole ecosystems. Current best practice attempts to avoid negative impacts and, where necessary, to restore impacted environments. This is an essential step if the sector is to contribute significantly towards sustainable development in the region.

Historically, as many as half a million hectares of land per year have been directly disturbed by mining across the globe (Young, 1992, in Johnson & Lewis, 1995). The area or "physical footprint" occupied by mine infrastructure is small in comparison to other land uses such as agriculture, but mining-related impacts are usually more intense, and may affect much larger areas due to the dispersal of pollutants through rivers, the atmosphere

Section 1 refers to the five overarching issues identified by stakeholders as critical for progress to sustainable development. These issues have not been dealt with in focussed research reports, but appear as crosscutting issues in the six research reports and in the recommendations listed below. A brief guide to the recommendations dealing with each critical issue shows their prevalence in the recommendations. Because these are cross-cutting issues, such a categorisation is to some extent artificial. For example, the recommendations relating to governance would, if implemented, impact on poverty alleviation, job creation, gender equity and capacity building.

A table of the detailed recommendations arising from the MMSD SOUTHERN AFRICA process follows this summary section.

**Recommendations**

6.1 Overarching issues

In a region where the average daily income is just above US$ 2 per capita, it is to be expected that poverty alleviation is a critical issue. It is notable that no expectations of 'hand-outs' were articulated in stakeholder interactions. The most important way in which poverty can be alleviated in the above recommendations is through involvement of all stakeholders. The processes involved include education, policy making and facilitating means of avoiding increased poverty, such as joining medical benefit schemes (recommendation 13). Job creation and capacity building are recommended as means toward poverty alleviation in recommendations 5, 23 and 36, and specific emphasis is placed on the small scale sector of the economy.

**Poverty alleviation**

Recommendations 2, 5, 11, 12, 13, 15, 17, 19, 23, 27, 35, 36
The small scale mining sub-sector, which is thought to employ 1.5 million people directly in the region, is characterised by severe poverty, leading to desperation and lawlessness (RT1 ITDG). Women constitute a significant number of small scale miners in the region. They make up an estimated 30 per cent in Zambia (Hentschel 2001), mainly in subordinate positions and on inequitable terms. Small scale mining poses great social development challenges for the mining and minerals sector and is currently an impediment to the transition to sustainable development.

The mining industry has shaped the lives of women in rural southern Africa for many generations. The important role women play in the rural economy, while the men leave to work on the mines, is a key feature of the mining industry (RT3 Ranchod).

As a result of the incomes lost through a reduction in the demand for labour, levels of poverty are likely to increase in families and communities that once specialised in exporting male labour.

Positive results have been achieved by multistakeholder initiatives that aim to reduce the impact of retrenchment on communities, especially in labour sending areas.

HIV/AIDS

HIV/AIDS is arguably the most significant threat to sustainable development in southern Africa. A decade ago, HIV/AIDS was regarded primarily as a health crisis. Today it is clear that the disease is a development crisis. The economic implications are dire: loss of productivity, the loss of benefits of education and training and the diversion of resources from investment to health, orphan care and funerals (Chanda, pers. comm. in RT2 Elias et al.).

The HIV/AIDS epidemic occurs within a context of declining living standards across the region. The frequent loss of both parents to AIDS has seen a rapid
The industry remains a most significant factor in the region’s future development. Figure 4 shows the important contributions that the industry makes to the region.

**Social Development**

Southern Africa is one of the least developed regions in the world and therefore poverty alleviation, job creation and capacity building are critical focal areas for the sector in its transition to sustainable development. Table 1 juxtaposes figures for human development in southern Africa with those in Australia. This comparison highlights the disparity between the mineral wealth of the region and the benefits which accrue to its population. The poverty of many southern African people is in stark contrast to the mineral wealth of the region. A primary opportunity in southern Africa is therefore to utilise this mineral wealth as a catalyst to improve the health, income and living conditions of the poor majority.

Table 1: Human development in southern Africa (adapted from 2001 World Development Indicators, World Bank.)

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage population under $2 per day</th>
<th>Illiteracy rate 1999 - Male %</th>
<th>Illiteracy rate 1999 - Female %</th>
<th>Access to an improved water source 2000 - % of population</th>
<th>Under-five mortality rate 1999 per 1000</th>
<th>Life Expectancy at birth 1999</th>
<th>Physicians per 1000 people 1990-1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>26.4</td>
<td>18</td>
<td>45</td>
<td>98</td>
<td>208</td>
<td>47</td>
<td>0.1</td>
</tr>
<tr>
<td>Botswana</td>
<td>25.2</td>
<td>29</td>
<td>45</td>
<td>95</td>
<td>39</td>
<td>64</td>
<td>0.1</td>
</tr>
<tr>
<td>DRC</td>
<td>31.7</td>
<td>40</td>
<td>60</td>
<td>203</td>
<td>38</td>
<td>46</td>
<td>0.1</td>
</tr>
<tr>
<td>Lesotho</td>
<td>28.7</td>
<td>28</td>
<td>45</td>
<td>91</td>
<td>141</td>
<td>45</td>
<td>0.1</td>
</tr>
<tr>
<td>Malawi</td>
<td>27.6</td>
<td>26</td>
<td>55</td>
<td>57</td>
<td>227</td>
<td>39</td>
<td>0.1</td>
</tr>
<tr>
<td>Mozambique</td>
<td>27.4</td>
<td>41</td>
<td>72</td>
<td>60</td>
<td>203</td>
<td>46</td>
<td>0.1</td>
</tr>
<tr>
<td>Namibia</td>
<td>32.8</td>
<td>18</td>
<td>20</td>
<td>77</td>
<td>108</td>
<td>50</td>
<td>0.2</td>
</tr>
<tr>
<td>South Africa</td>
<td>35.8</td>
<td>14</td>
<td>16</td>
<td>86</td>
<td>76</td>
<td>48</td>
<td>0.6</td>
</tr>
<tr>
<td>Swaziland</td>
<td>35.7</td>
<td>16</td>
<td>34</td>
<td>54</td>
<td>152</td>
<td>45</td>
<td>0.1</td>
</tr>
<tr>
<td>Tanzania</td>
<td>37.4</td>
<td>15</td>
<td>30</td>
<td>64</td>
<td>187</td>
<td>38</td>
<td>0.1</td>
</tr>
<tr>
<td>Zambia</td>
<td>41.6</td>
<td>8</td>
<td>16</td>
<td>85</td>
<td>118</td>
<td>40</td>
<td>0.1</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>42.2</td>
<td>8</td>
<td>16</td>
<td>85</td>
<td>118</td>
<td>40</td>
<td>0.1</td>
</tr>
<tr>
<td>For comparison Australia</td>
<td>0.0</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>5</td>
<td>79</td>
<td>0.8</td>
</tr>
</tbody>
</table>

20 litres per person per day at least one kilometre from dwelling
1 Data for the most recent years available
2 Less than 0.05

shared equitably between all stakeholders, government policies will determine whether such an enabling environment exists or not.

However, while government should take the lead, governance is not just the responsibility of the state, but of all stakeholders, and the benefits accruing from good governance affect all stakeholders. A healthy and normalised childhood is envisaged in recommendations 9 and 10. Sound governance is needed to address the situation of marginalised and disempowered sectors of the community, such as women (recommendations 26-30), resettled communities (recommendations 19-21) and those infected with HIV/AIDS (recommendations 12, 13, 14 and 16). Good governance promotes regional co-operation in recommendations 33, 37 and 38. Recommendations 32, 33 and 34 aim to protect the natural environment, and this also needs implementation of enabling policies. In recommendations 35 and 36, the equitable distribution of the rents from mineral exploitation is ensured by good governance.

The emphasis on good governance in the recommendations aligns with the principles of NEPAD.

**Gender equity**

Recommendations 8, 15, 26, 27, 28, 29

In a region where the majority of the population are poor, women are among the poorest. Culturally, historically and economically they are also disempowered and form a significant marginalised group. The recommendations address all these issues, and, in addition, recommendation 8 urges women to take steps to alleviate their position themselves. The main thrust of the recommendations is the empowerment of women, because equity will flow from this. The empowerment is either educational (recommendations 15 and 28), economic (recommendations 15 and 27), job opportunities (recommendations 27 and 28), or by recognition of their status as legitimate stakeholders (recommendation 26).
Although gender issues were singled out for attention by stakeholders, all the recommendations in this report are intended to benefit all stakeholders, including women.

**5.3 MMSD SOUTHERN AFRICA recommendations.**

<table>
<thead>
<tr>
<th>Social system</th>
<th>Economic system</th>
<th>Biophysical system</th>
<th>Governance</th>
<th>All spheres of sustainable development</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>C</td>
<td>Q</td>
<td>J</td>
<td></td>
</tr>
<tr>
<td>Poverty alleviation</td>
<td>Capacity building and skills training</td>
<td>Gender equity</td>
<td>Job creation</td>
<td></td>
</tr>
</tbody>
</table>

**Small scale mining**

**Recommendation 1:** small scale miners recognise their role in the economies of the region and commit themselves to cooperation with the other stakeholders in the sector to align small scale mining activities with the principles of sustainable development.

**Recommendation 2:** national governments support the transition of small scale mining to the formal sector through the implementation of policies specifically geared to this sub-sector.

**Recommendation 3:** SADC creates a forum to promote the development of a harmonised regional legal framework to enable the activities of small scale miners to be conducted in an orderly and systematic manner.

**Recommendation 4:** appropriate stakeholders (e.g. donors, Chambers of Mines, NGOs, small scale miners, companies, governments and labour) encourage, facilitate and support the formation of small scale mining associations and co-operatives.

Although gender issues were singled out for attention by stakeholders, all the recommendations in this report are intended to benefit all stakeholders, including women.
human and environmental health. However, it has the potential to economically empower disadvantaged groups and enrich nations by virtue of its low investment costs and short lag-time from discovery to production. The sector is also able to exploit marginal mineral deposits that are not economically viable for large mining companies (RT1).

Despite the prevailing economic pressures on the mining industry, the mining sector in the twelve mainland SADC countries directly employed 2 million people in 2000. This figure does not include informal miners, except in Tanzania (SADC, 2001).

While these figures do not account for the millions of people dependent on miners’ incomes for their livelihoods, they do emphasize the importance of the mining sector as a source of employment.

The wealth generated by the mining and minerals industry has not always been used to rehabilitate environmental degradation caused by mining nor to benefit the communities affected by the industry. In spite of this history, current trends in the mining and minerals industry indicate that it can contribute to the region’s move towards sustainable development.

Recommendation 5: education institutions, in partnership with companies and government, develop and offer appropriate training programmes for comprehensive business skills acquisition by small scale miners; and financial institutions (banks, development agencies), government, companies and NGOs facilitate access to credit adapted to the specific requirements of small scale miners.

Recommendation 6: education institutions, in partnership with government, companies and donors, develop and offer appropriate capacity building programmes, information gathering and sharing mechanisms for comprehensive technical skills acquisition by small scale miners.

Recommendation 7: small scale miners’ associations form collaborative partnerships with companies for mutual benefit.

Recommendation 8: associations for women miners use existing instruments, such as the Beijing Platform of Action, the United Nations Convention on the Elimination of All Forms of Discrimination Against Women and the SADC Heads of Government Declaration on Gender, 1997, to lobby government to ensure equal opportunities for women in small scale mining.

Recommendation 9: all governments adopt and monitor the implementation of ILO Convention No.182 and IPEC to ensure the elimination of the worst forms of child labour in mining.
of mining and mineral processing activities in the long-term by promoting diversification via economic linkages (Walker, 2001).

The economic benefits attributable to the mining sector are reflected in the contribution to direct foreign exchange earnings as shown in Figure 3. Overall, it is conservatively estimated that mining contributed an average of 40 per cent to the direct foreign exchange earnings of SADC countries in 2000 (Mbendi, 2000; CIA, 2001, both in Hounsome & Ashton, 2001).

![Figure 3: Contribution of mining to GDP, selected countries (source: SADC 2001 in RT5 MacFarlane). * Some authorities consider mining’s direct contribution to Namibia’s GDP to be 15% (Schneider, pers. comm., 2001). ** Figures for Zimbabwe from Murangari (pers. comm., 2001). No data was available for Democratic Republic of Congo.]

The estimates of foreign exchange earnings are likely to be on the conservative side as they exclude the economic contribution made by informal miners to the economies of several countries.

Small scale mining is largely a poverty-driven activity, typically practiced in the poorest and most remote rural areas by a largely itinerant, poorly educated populace with few employment alternatives (RT1).

This activity is usually wasteful of non-renewable resources and hazardous to

** Recommendation 10:** governments, donors, NGOs and small scale mining associations provide adequate, accessible and affordable schooling and day-care for the children of small scale miners.

** Recommendation 11:** where appropriate, areas for small scale mining activities are identified within local development planning processes; environmental management and assessment tools, such as strategic environmental assessment and cumulative effects assessment, are applied to determine the operating and rehabilitation guidelines for small scale miners within a framework of sustainable development.

** Recommendation 12:** government, labour and companies initiate and support development plans aimed at alleviating rural poverty in labour sending areas and making affected rural communities less dependent on income from migrant labour.

** Recommendation 13:** governments, labour and companies, in cooperation, investigate financially viable programmes to enable workers to join medical benefit schemes so that workers who contract HIV/AIDS are able to receive care without additional financial distress, and government, labour, companies and NGOs initiate and support community home-based care programmes.

**HIV/AIDS**
Sustainable development is at the core of this initiative and it will be important that synergies be explored between MMSD and NEPAD in the implementation of MMSD recommendations in Africa.

**Economic Development**

Today, despite recent adverse economic features and depressed commodity prices for many metals and mineral products, mining and its associated industries continue to form the cornerstone of the economies of most southern African countries. The mining industry has been pivotal in the development of infrastructure and the establishment of manufacturing industries in the region. Manufactured products have been produced in nine SADC countries, mainly in the iron and steel and copper industries.

The role of mining and minerals in the history of the region has been both positive and negative, and it remains so today. To form a complete picture of the way in which mineral wealth contributes to, or detracts from, sustainable development, cognisance should be taken of the extent to which minerals fuel civil wars and undermine governments and economies. Several countries in the region are involved in civil wars which are at least partly funded by proceeds from diamond and base metal sales. This situation is compounded by the high levels of corruption which exist in these countries.

A lack of recent progress in downstream value addition to commodities typifies southern African countries (RT5 MacFarlane). The reason for this lack of progress is identified as business environments that are not conducive to investment in certain areas of minerals beneficiation. The role of government, in this regard, is to create an enabling environment for investment in beneficiation as opposed to one of direct intervention. Governments are now encouraging downstream development of, for example, the jewellery industry. Given that sub-Saharan Africa has almost complete resource integrity, there is considerable opportunity for ensuring the sustainability

**Recommendation 14:** all stakeholders in the sector develop national HIV/AIDS management programmes in partnership with each other and with international donors and the pharmaceutical industry.

**Recommendation 15:** women are made less vulnerable to HIV/AIDS infection through economic and educational empowerment, and governments, NGOs and companies support such empowerment.

**Recommendation 16:** where practical, affordable and supported by residents, the move towards replacing single-sex hostels, which have been identified as one of the critical channels for the transmission of HIV, with family housing units, is accelerated.

**Recommendation 17:** where feasible and appropriate, stakeholders, especially companies and labour, facilitate the retention of people living with AIDS as productive members of the workforce for as long as possible.

**Recommendation 18:** all stakeholders, and particularly governments, commit themselves to good governance, so that the HIV/AIDS pandemic can be effectively managed and their people are protected from the escalation of the disease.
The operating context for the mining and minerals sector in southern Africa is a daunting one. The region has abundant mineral resources, but limited food production potential and water availability. Severe poverty, poor governance and social inequities prevail, and currently pose immense challenges for sustainable development. Mining and minerals processing provides a unique opportunity for developing the human capital of the region and ensuring economic stability. Such developments have an ecological price, and the wealth generated must be used, not only to bolster economic and social systems, but also to minimise environmental damage.

Governance

Systems of government in the region are diverse, ranging from liberal democracies, with devolution of power to local levels, to authoritarian states. Conflict and extreme instability make characterisation of the system of government in some countries difficult. A lack of capacity to implement policy is a characteristic of governments throughout the region.

The New Partnership for Africa's Development (NEPAD)

This widely supported initiative recognises that sustainable development can only occur when good governance and a lack of corruption underpin progress. Article 71 of NEPAD states: African leaders have learnt from their own experiences that peace, security, democracy, good governance, human rights and sound economic management are conditions for sustainable development. They are making a pledge to work, both individually and collectively, to promote these principles in their countries, sub-regions and the continent (Government Communications 2001, p 16).
of a portion of the workforce on a permanently urbanised basis. The essential migratory quality of the mine labour system remains and seems unlikely to disappear soon.

Southern African countries have been significant global players in the exploitation of minerals for most of the last century. South Africa’s share of global gold production peaked in 1970, but steadily declined thereafter. In terms of Gross Domestic Product (GDP), mining (with gold mining as the most valuable component), remained the sector producing the largest share of the country’s wealth until the 1960s.

In 1890 Zimbabwe was colonised by Rhodes’ Pioneer Column. Many small deposits were found, and the diverse mining of small deposits has remained a feature of that country's mining industry.

Large-scale mining in the Zambian Copperbelt commenced in the 1930s. Copperbelt operations were managed privately until after independence in 1964, when they were nationalised. Continued decline in copper prices and a lack of reinvestment in mining infrastructure resulted in decreasing production, and privatisation, which was necessary to save the mines, began in 1993.

Enabling and investor-friendly policies ensured that the mining and minerals sector developed rapidly in Tanzania in the 1990s. Tanzania is thought to have the largest gold reserves in southern Africa after South Africa and in 1999 this sector grew by 27 per cent. It is likely that Tanzania will be producing more than 1,500,000 ounces by the middle of this decade (Mbendi 2001).

The following minerals and metals have been of major importance in the history of mining development in southern Africa: chromium, coal, cobalt, copper, diamonds, gold, iron, manganese, nickel, phosphates, platinum-group metals (PGMs), semi-precious stones, lead, zinc and titanium. Over 60 minerals are mined in the SADC region and exported to more than 100 countries worldwide.

Recommendation 23: where appropriate, companies, in partnership with communities, identify and address development opportunities and constraints in local communities by means of technical and financial support and outsourcing.

Recommendation 24: governments establish incentives for companies to promote local social development and all stakeholders co-operate to clearly define responsibilities and objectives in local development initiatives.

Recommendation 25: governments establish stakeholder fora, guided by planning frameworks, to direct privatisation and restructuring and to implement social impact assessment and post-implementation monitoring of a social fund.

Recommendation 26: companies ensure that their community consultation policies are broad-based enough to include women as a stakeholder group in their own right so that their concerns are given fair weighting.

Recommendation 27: companies, NGOs, governments and the community itself ensure that women have an equitable opportunity to share in the benefits accruing to the community, whether these are local development initiatives, employment opportunities or skills development.
“Southern Africa’ refers to that group of states extending from South Africa north to the Democratic Republic of Congo (DRC). The term encompasses Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Zambia and Zimbabwe (Figure 2). Mauritius and Seychelles were not included because little or no mining takes place in these island states.

The mining and minerals sector has played a significant role in the development of the southern African region, and is in a unique position to take the lead in the region’s progress towards sustainable development.

In the last quarter of the nineteenth century southern Africa experienced a mineral revolution. The large-scale mining of high value commodities, first diamonds and then gold, launched the region into industrialisation and paved the way for the emergence of a modern capitalist economy.

The effects of development in the minerals sector were not all positive. In South Africa, for example, patterns of labour and economic development, based on racial lines, were reinforced. The colour bar, migratory labour and the mine hostel system became an integral part of the exploitation of minerals. From 1975, these inequities were addressed as South Africa progressed steadily towards the extension of labour rights to all, and in 1994 the first democratic elections ended formal restrictions on franchise and employment. There has been progress in the advancement of some black workers into skilled jobs and there has been some stabilisation.

### Recommendations

**Recommendation 28:** companies and labour adopt proactive policies to facilitate women’s entry into the workplace and to promote their advancement; financial institutions, development agencies and learning institutions support these initiatives.

**Recommendation 29:** NGOs, research bodies and education institutions investigate issues around gender and mining and government, companies and labour provide appropriate support for such research.

**Recommendation 30:** SADC and individual governments in southern Africa develop and implement a regional strategy for the integration of women into the mining sector.

**Recommendation 31:** to assist the sector to manage the impacts of mining and minerals processing on the natural environment that were not covered by the MMSD research component, detailed research programmes are commissioned in the region to focus on those additional aspects.

**Recommendation 32:** stakeholders, particularly government and mining companies, adopt collaborative approaches, including cumulative effects assessment, to develop a framework for the management and mitigation of the biophysical impacts of mining.
Stakeholder engagement and consultation informed all the activities of the MMMD SOUTHERN AFRICA initiative. Southern Africa is a vast region, and to engage satisfactorily with all stakeholders in a short space of time was not possible. Nonetheless, MMMD SOUTHERN AFRICA now communicates regularly with over one thousand individuals and organisations. A continuous flow of information has been one of the success factors of the stakeholder engagement process.

In addition to the above, MMMD SOUTHERN AFRICA conducted numerous workshops and focus group meetings in a number of countries in the region. The issues raised at these meetings correlated closely with the issues identified in the research reports.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>33</strong></td>
<td>SADC governments harmonize their legislation and database compilation to optimise the management of environmental impacts and to minimize disputes over shared natural resources.</td>
</tr>
<tr>
<td><strong>34</strong></td>
<td>Companies and regulatory authorities adopt policies that effectively reduce the negative impacts of seepage on the environment and minimize water loss and water use.</td>
</tr>
<tr>
<td><strong>35</strong></td>
<td>Governments and companies ensure that early consultation with stakeholders occurs and that consensus is reached on how benefits and costs are to be shared.</td>
</tr>
<tr>
<td><strong>36</strong></td>
<td>Governments adopt policies aimed at creating an enabling environment for job creation in large- and small-scale mining and minerals industries, and introduce specific incentives and support mechanisms to encourage and marry agricultural and small-scale mining activities in rural areas.</td>
</tr>
<tr>
<td><strong>37</strong></td>
<td>The geoscience organisations in the various southern African states accelerate the current endeavour to establish a common geological database for the region and extend the information system to include information that will facilitate greater stakeholder engagement.</td>
</tr>
</tbody>
</table>
Recommendation 38: governments and SADC align national and regional policies, legislation and government administration models with the goals of sustainable minerals and mining development for the region.

Recommendation 39: to ensure that sustainable land-use is possible once mining has ceased, governments, in consultation with key stakeholders, determine the end land-use prior to mining authorisation.

Recommendation 40: best practice international accounting standards are used to develop guidelines for a system of valuation standards which reflect natural capital and the associated development costs in the systems of national accounts for the region.

Recommendation 41: all companies produce sustainability reports as part of their annual financial report, and global companies provide statistics on a country by country basis for the southern African region.

Recommendation 42: a high-level multi-stakeholder forum is established to implement the recommendations of this report.

Congo prevented effective engagement with stakeholders in these countries.

The Steering Committee of MMSD SOUTHERN AFRICA, representative of key stakeholder groups from across the region, was elected at the MMSD Multi-stakeholder Meeting held in Johannesburg in November 2000. The role of this committee is to:

- provide general advice and support to the Working Group,
- peer review the outputs of the Working Group, and assure the quality of such outputs, and
- engage with stakeholders in their constituencies.

The Steering Committee advised and guided IIED in the selection and appointment of the MMSD SOUTHERN AFRICA Working Group.

To further ensure that the process was a regional one, and that the research results reflected views from the different southern African countries, emphasis was placed on appointing researchers from across the region. Figure 2 shows the countries of the region and indicates the level of participation.

Figure 2: The southern African region as defined for the MMSD project showing participation in the project.
At a second multi-stakeholder meeting, held in Johannesburg on 18/19 September 2001, stakeholders reviewed the results of the research component. Recommendations from the research reports were prioritised for implementation by stakeholders at this meeting. These recommendations are contained in the regional report, which was circulated to stakeholders in draft form for further comment and refinement.

Stakeholders identified certain overarching issues that have to be addressed if progress towards sustainable development is to be achieved. These priorities appear as crosscutting issues in the recommendations. The critical issues in the region are:

- poverty alleviation,
- capacity building and skills training,
- gender equity,
- job creation, and
- governance.

Stakeholder consultation was undertaken to ensure that the report reflects the views of as many of the stakeholders in the mining and minerals sector in southern Africa as possible. Political conditions in Angola and the Democratic Republic of

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**Figure 1:** The MMSD southern Africa process, indicating the strong stakeholder involvement.

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**References**

- **Murangari, D. (2001).** pers. comm., e-mail: chamines@africaonline.co.zw
- **RT1 ITDG (2001).** Small scale mining & sustainable development within the SADC region, MMSD SOUTHERN AFRICA Report on Research Topic 1, ed B. Dreschler, ITDG, August, 204 pp. (included on accompanying CD).
MMSD aims to build ongoing networks of stakeholders and regional governance that will last beyond the lifetime of the project.

The objective of MMSD is to determine how the mining and minerals sector can best contribute to the region's transition to sustainable development.

The MMSD project comprises two components: research and stakeholder consultation. These components are interactive and complementary - the regional issues to be researched were identified by the stakeholders, and the resulting research reports, in turn, reflect the priorities of the stakeholders.

Recommendations for implementation have been developed in collaboration with stakeholders.

In November 2000, at a Multistakeholder Meeting in Johannesburg, stakeholders identified five key areas for research. A sixth research report, a baseline study of the industry, was commissioned and funded directly by the global MMSD project.

The five research topics identified by stakeholders are:

1. Small scale mining and sustainable development in southern Africa (RT1),
2. HIV/AIDS, the mining and minerals sector and sustainable development in southern Africa (RT2),
3. Social issues within the mining and minerals sector in southern Africa (RT3),
4. Mining, minerals, the biophysical environment and the transition to sustainable development in southern Africa (RT4), and
5. Mining, minerals, economic development and the transition to sustainable development in southern Africa (RT5).

REFERENCES


The move towards sustainable development in the mining and minerals sector in southern Africa can build on a wealth of experience, knowledge and skills in the sector and the region. The momentum that has been created by the MMSD project must not be allowed to dissipate. If all the stakeholders in the sector bring their strengths to a multistakeholder forum to carry the process forward, the mining and minerals sector can make a real and lasting difference to ensure an equitable dispensation for all aspects of sustainable development - governance, society, economic growth and the environment.

1. Introduction

The Mining, Minerals and Sustainable Development (MMSD) project is an independent process of multistakeholder engagement and participatory analysis that seeks to address every aspect of the interface between the mining and minerals sector and the concept of sustainable development. The aim of MMSD is to “identify how the mining and minerals sector can best contribute to the global transition to sustainable development”.

MMSD is a two-year project that began in April 2000. The project should result in the creation of structures capable of being carried forward after its completion.

To promote co-operation and reconcile divergent views, MMSD is involved in regional processes in the world’s major mineral producing and consuming regions. These include southern Africa, Latin America, Australia and North America. Scoping studies are being conducted in Southeast Asia, the former Soviet Union and Europe. These regional MMSD processes are crucial components of the project. Stakeholders in each of the regions are drawn from NGOs, academia, governments, private companies, organised labour, trade organisations, co-operatives, regional agencies and international organisations. Each region is engaged in scoping issues and identifying what institutional framework could be

**REFERENCES**


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