

MINERALS POLICY OF NAMIBIA

Ministry of Mines and Energy
Private Bag 13297
WINDHOEK
NAMIBIA

FOREWORD

The Government of the Republic of Namibia is committed to the development of the Namibian mining industry, as demonstrated in this Minerals Policy, within a free market environment. Twelve years after the attainment of independence, the introduction of the Minerals Policy is a milestone for the Ministry of Mines and Energy for the further development of the Namibian mining industry.

The Government recognises the important contribution of the mining industry to the social and economic development of Namibia. The industry has played a significant part in the economy since the turn of the century. Namibia is fortunate to host a wide range of mineral deposits, a number of which are considered to be world class, such as diamonds and uranium. In addition, we are blessed with other mineral resources such as gold, base metals, industrial minerals, a wide variety of semi-precious stones and several types of dimension stones. The mineral resource potential of the country is indeed abundant and has yet to be fully tapped for the benefit of the nation.

To achieve a sustained contribution from the mining sector to the economy, the Government has created a conducive and enabling legislative, fiscal and institutional environment to attract private sector driven exploration and in which mining companies can thrive. The Ministry of Mines and Energy has taken steps to revitalise and promote the mining industry through reviews of mining legislation and the formulation of a Minerals Policy that will enhance Namibia as an attractive investment destination.

This Minerals Policy was formulated in a spirit of wide and extensive consultations with all stakeholders in a process that was spearheaded by the Minerals Policy Committee of the Ministry of Mines and Energy. The consultations were also extended to communities where small-scale mining activities are concentrated. The valuable contribution of all stakeholders is greatly appreciated and is a demonstration of the immense support that the Ministry of Mines and Energy received in the policy formulation process.

I encourage investors to appreciate the Government's commitments in this policy document and I am confident that the Namibian mining industry will continue to prosper for the benefit of all Namibians.

……
Dr. Nickey Iyambo, MP
Minister of Mines and Energy

EXECUTIVE SUMMARY

The Minerals Policy of Namibia sets out guiding principles and direction while communicating the values of the Namibian people in pursuit of the development of the mining sector.

An overview of the broader economy, national goals and objectives are provided in the introduction. The section affirms the importance of mining in the broader national economy and the role the sector plays. The mining sector must fit into this broad national economy and contribute to the achievement of the national goals. The mining sector is expected to play a leading role in the projected growth of the national economy. It is in this light that the mineral wealth has been considered and through a consultative process, key areas of policy options have been identified. In consideration of this policy due cognisance has been taken of the need for sustainable development, increasing competition due to globalisation and market forces, and the need to protect the environment.

The Government of Namibia recognises that the exploration and development of its mineral wealth could best be undertaken by the private sector. Government therefore focuses on creating an enabling environment for the promotion of private sector investment in the mining sector. This will include competitive policy and regulatory frameworks, security of tenure and the provision of national geo-scientific data to further stimulate exploration and mining. In the same vein the Government will expect the industry to take the challenge of social responsibility in terms of planning for closure, community involvement and empowerment of formerly disadvantaged people.

Government acknowledges the participation of Namibians in small-scale mining. The Government remains committed to the promotion and development of the small-scale mining sector. It will investigate and take measures to support orderly operations of small-scale mining to allow legally supported operations in areas where large-scale mining is not cost efficient.

The increase in marine diamond exploration and mining has raised Government interest in marine mining. Government will enact an appropriate legal framework and attend to relevant issues that are specific to marine exploration and mining. Environmental concerns will be carefully considered in all issues.

Government acknowledges the potential for value addition to minerals that are produced in Namibia. Currently Namibia exports most minerals with little value addition, meaning that the full potential of benefits to the nation are not realised. The Government will explore opportunities for the promotion of value addition, investigate constraints and promote measures to address them.

Radical changes in the global economic environment have resulted in intense competition between developing countries to attract foreign direct investment. Developing countries have embarked on wide ranging structural reforms to be more competitive. Namibia, as a participant in the global mining industry, will promote and encourage investment in its mining sector not only through effective marketing, but also by its investor friendly fiscal and legal environment.

Globally, environmental issues in mining have gained prominence. All minerals producers have begun to pay attention to environmental concerns as poor practices deter investment. Government will ensure that the development of the Namibian mining sector is environmentally acceptable and includes consideration of the health and safety of people.

Government recognises that human resource development is critical to the development of the Namibian mining sector. The country is facing a shortage of skilled professional and technical personnel in all categories of the mining sector. In response to this, the Government took a number of initiatives to develop the skills base in the sector. Since this has not fully addressed the backlog, Government will encourage and facilitate the development of skilled personnel to meet the challenges of the mineral sector. It will address the issues with short-term solutions to meet current needs and long-term solutions to solve the undersupply of skilled labour. In the long term industry is expected to advance the cause for the Namibian people and accord opportunities to women, as outlined in other government policies.

Technical capacity is an important precondition for maintaining a competitive mining industry. The Government acknowledges that the continued competitiveness and sustainability of the Namibian mining industry will be determined by the ability of local institutions to maintain the use of new and efficient mining technologies. The Government will encourage and promote research and development in search of solutions to the challenges of the minerals sector.

The Ministry of Mines and Energy (MME) facilitates and regulates the responsible development of the minerals sector for the benefit of all Namibians, but it also works closely with other government ministries to achieve that goal. The MME will play a leading role and keep the legal framework in line with global best practice while managing the sector with transparency.

The Namibian Government recognises its commitment to the Southern African Development Community (SADC) region. The member States of the SADC agreed through a treaty to formulate common approaches to policies, strategies and programmes. Currently regional programmes are being developed for the benefit of all member States. The Government is committed to the SADC Treaty and the SADC Mining Protocol.

The Way Forward deals with the effective implementation of the Minerals Policy and it asserts that political will supports and delivers the outcomes of the Policy. Further, it ensures that a will to deliver and a work programme by the Ministry of Mines and Energy lays the foundation to the success of this Policy.

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ACRONYMS

AIDS:	Acquired Immune Deficiency Syndrome
COM:	Chamber of Mines
CTMS:	Computerised Title Management System
EIA:	Environmental Impact Assessment
EMP:	Environmental Management Plan
EMPR:	Environmental Management Programme Report
EPZ:	Export Processing Zone
GDP:	Gross Domestic Product
HIV:	Human Immune Deficiency Virus
HR:	Human Resources
MARC:	Minerals Ancillary Rights Commission
MBE:	Ministry of Basic Education, Sports and Culture
MCC:	Mining Co-operation Council
MDF:	Minerals Development Fund
MET:	Ministry of Environment and Tourism
MF:	Ministry of Finance
MFMR:	Ministry of Fisheries and Marine Resources
MHA:	Ministry of Home Affairs
MHE:	Ministry of Higher Education, Training and Employment Creation
MHSS:	Ministry of Health and Social Services
MME:	Ministry of Mines and Energy
MMO:	Marine Mining Operators
MPC:	Minerals Policy Committee
MTI:	Ministry of Trade and Industry
MWT:	Ministry of Works, Transport and Communication
NDP1:	First National Development Plan
NDP2:	Second National Development Plan
NGO:	Non-Governmental Organisation
NIMT:	Namibia Institute of Mining and Technology
NOSA:	National Occupation Safety Association
NRST:	Non-Resident Shareholder's Tax
NSMAC:	Namibia Small Miners Assistance Centre
R&D:	Research and Development
SACU:	Southern African Customs Union
SADC:	Southern African Development Community
SSM:	Small-Scale Mining
STEEP:	Social, Technology, Economic, Environmental and Political
SWOT:	Strengths, Weaknesses, Opportunities and Threats
SYSMIN:	The SYStem of support to the MINing sector
VMS:	Vessel Monitoring Systems

1. INTRODUCTION

1.1 Rationale for a Minerals Policy

The Government of Namibia has developed a minerals policy to ensure the continued development of the mining industry. The formulation of such a policy will contribute to the creation of an environment that attracts both foreign and local investment in mining. It will also contribute to the development of opportunities for the Namibian people to benefit from their country's mineral resources in line with the Government's policy on socio-economic upliftment.

1.2 Vision and Mission

Vision

To achieve a high level of responsible development of national resources in which Namibia becomes a significant producer of mineral products while ensuring maximum sustainable contribution to the socio-economic development of the country.

To further attract investment and enable the private sector to take the lead in exploration, mining, mineral beneficiation and marketing.

Mission

The Ministry of Mines and Energy (MME), as the custodian of Namibia's rich endowment of mineral and energy resources, facilitates and regulates the responsible development and sustainable utilisation of these resources for the benefit of all Namibians.

1.3 The Minerals Policy Formulation Process

A mineral policy committee comprising representatives from the Directorates of the Ministry of Mines and Energy guided the formulation of the minerals policy.

In order to develop a minerals policy that focuses on the needs of the Namibian economy and people, it was essential that the policy be '*home-grown*'. This required the Namibian Government to consult all relevant stakeholders in the country in developing this policy. This was achieved through a series of well-attended participative workshops. Additionally, due cognisance was taken of the need for sustainable development, increasing competition due to globalisation and market forces, and the need to protect the environment.

1.4 The Economic and Development Context of the Minerals Policy

Mining has been the cornerstone of Namibia's economy for decades. In spite of a relative decline in its contribution in recent years, the sector looks set to maintain its importance to the Namibian Gross Domestic Product (GDP), exports and tax revenue into the foreseeable future. Thus the mining industry is essential to the development goals of Namibia, as enunciated in the present National Development Plan.

1.4.1 The Namibian Economy

The Namibian economy relies on the primary and tertiary sectors as the main contributors to GDP. Commercial livestock farming, fishing, mining, wholesale and retail, and transport services have been the backbone of the country's economy, while the service sector account for a substantial share of GDP. However, the manufacturing base remains small and is still under-developed. It is the wish of government to concentrate on areas of production where there are competitive advantages.

At the beginning of 1999 Government articulated a vision, which aims to make Namibia an industrialised state by the year 2030. Vision 2030 provides a national strategic framework for designing broad strategies for long-term national economic development, which are to be implemented through medium-term development plans.

1.4.2 Development Goals of the Namibian Government

In 1995, five years after independence, the Namibian Government launched its first National Development Plan (NDP1). The NDP1 superseded the Transitional National Development Plan, which had focused on consolidating democracy. The main achievement of the transitional plan was that it had put in place the basic organs of government. The NDP1 built on these achievements over the period 1995/96 to 1999/2000 and mainly put in place an enabling environment for strong private sector participation in the economy.

The second National Development Plan (NDP2) is being implemented over five years (from 2000/01 to 2005/06), and is geared to achieve the medium-term objectives of the longer-term development perspective (Vision 2030) for Namibia. The NDP2 retains the NDP1 objectives, but has additional objectives that take into account the prevailing situation in the country.

The NDP2 goals are to:

- *reduce poverty;*
- *create employment;*
- *promote economic empowerment;*
- *stimulate and sustain economic growth;*
- *reduce inequalities in income distribution;*
- *reduce regional development inequalities;*
- *promote gender equality and equity; and*
- *increase environmental and ecological sustainability.*

The mining industry is expected to play an essential role in achieving these national objectives as projected in the NDP2.

1.4.3 The Mining Sector

Namibia is endowed with abundant mineral resources and the mining industry is and will continue to form a significant part of the national economy for the foreseeable future. The full potential is largely still untapped in a landmass that requires more intensive grassroots mineral exploration.

Contribution to GDP

Mining contributes between 10% and 13% to the GDP. The contribution is expected to increase by 4% when the new Skorpion zinc mine and refinery comes into full production in 2003. Thereafter the growth rate will more likely remain the same in the medium-term, largely due to the continued growth in diamond mining. This is despite the significant growth achieved in other sectors of the economy.

Contribution to Export

Namibia's merchandise exports are dominated by mineral exports and reflect the changing composition between diamonds and other minerals. In 1990 diamonds accounted for only 40% of mineral exports. This had grown to 91% in 1999. Mineral exports add up to more than 40% of foreign exchange income.

Contribution to Tax Revenue

Direct tax revenue from the mining sector remains of considerable importance to the income of central government. Since independence, corporate taxes from mining companies have contributed between 30% and 50% of all receipts. These values are increased when direct taxes on diamond exports are taken into account.

Contribution to Employment

Despite the fact that the mining sector employs less than 2% of the total labour force (according to 1997 figures) down from almost 8% in the early eighties, the mining sector is still the largest private sector employer. In 2001 the mining sector employed 6165 people.

1.4.4 Mineral Legislation Overview

In Namibia all mineral rights are vested in the State and are regulated by the Minerals (Prospecting and Mining) Act of 1992. This Act was promulgated soon after independence in order to repeal old legislation inherited from the colonial regime. This Act is currently under review and will accede to policies raised in this document. In 1999 the Government promulgated the new Diamond Act, which was implemented on April 1, 2000. Furthermore, new Draft Mine Health and Safety Regulations are also awaiting promulgation.

1.5 Profile of the Mining Sector

Namibia produces a wide range of minerals and metals as follows:-

Diamonds

Diamonds are mined in Namibia from secondary deposits located along the Orange River, the southern portion of the coast as well as in offshore areas. The diamonds mined are of exceedingly high quality, with about 90% consisting of gem quality. To date, offshore mining constitutes some 60% of the total Namibian diamond production. Exploration for secondary diamond deposits is currently conducted along the entire Namibian coast, as well as in offshore areas. Exploration for primary diamond deposits is concentrated over cratonic areas in north-eastern and eastern Namibia.

Uranium

The Rössing mine near the Swakopmund coastline is the only uranium mine in Namibia. Production is normally in line with delivery requirements to existing customers and the objective of reducing global uranium inventory and mine costs. However, low uranium prices have stopped further exploration for this commodity and have also halted further development of three possible feasible projects.

Base Metals

Copper is currently produced at several major mines and is smelted at Tsumeb. Lead and zinc are also mined in Namibia and some of which are exported as concentrates. Exploration for base metals is currently conducted in the so-called “Sperrgebiet” in southern Namibia, as well as within the carbonate platform sediments in northern Namibia.

Precious Metals

Gold is currently mined at only one location in the country, but it is also produced as a by-product of copper refining. Exploration for gold mineralisation is currently conducted at various locations. Exploration for Platinum Group Elements (PGEs) is currently underway in northern and southern Namibia.

Industrial Minerals

Namibia produces a wide variety of industrial minerals including fluorspar, wollastonite, bentonite, salt and others. Apart from fluorspar and salt, these minerals are only mined on a small scale. There is good potential for further growth of the industrial mineral sector.

Gemstones

Namibia is a source of a great variety of gemstones such as tourmaline, aquamarine, garnet, amethyst and topaz. Gemstone mining plays a vital role in Namibia, both in the formal and informal sectors. In particular, the small-scale mining community is increasingly making use of these available mining opportunities.

Dimension Stone

Namibia produces a wide variety of dimension stone, consisting mainly of marbles, granites, diorites and sodalite. Most of the dimension stone is exported as raw blocks, with only a small quantity being cut and polished locally. In addition, marble derivatives find application in the industrial sector. This sub-sector poses opportunities for further development.

1.6 The Objectives of the Minerals Policy

The major challenge faced by the Government is to ensure the sustainable contribution of minerals to the socio-economic development of Namibia. Accordingly, the policy objectives of the Government for the mineral sector are to:

Promote and stimulate investment in exploration and mining so as to discover new ore deposits that will lead to the development of new mines and also to maintain the existing ones;

Promote a conducive environment for the mineral sector that encourages and facilitates the active participation of all stakeholders;

Promote and encourage local participation in exploration and mining;

Promote and encourage maximum local beneficiation of mineral products to ensure that as many of the economic benefits as possible are retained in Namibia for the benefit of all its citizens;

Regularise and improve artisan and small-scale mining so that it becomes part of the formal mining sector;

Promote research and development for improving technology in exploration, mining and mineral processing operations;

Ensure the establishment of appropriate educational and training facilities for human resources development to meet the manpower requirements of the minerals industry;

Promote and facilitate marketing arrangements to increase the economic benefits of the sector;

Ensure the adherence to the principle of socio-economic upliftment through appropriate measures;

Ensure compliance with national environmental policy and other relevant policies to develop a sustainable mining industry.

Review on a regular basis the legal, economic, social and political aspects of the Minerals Policy, to ensure that it remains internationally competitive, that it adequately addresses the mining industry's volatility and that it serves the common good of Namibians; and

Ensure mining operations are conducted with due regard to the safety and health of all concerned.

1.7 The Structure and Expression of the Policy

The draft minerals policy paper encompasses eight key themes:

The Mining Industry, which deals with the promotion and growth of three sectors, namely medium- to large-scale mining, small-scale mining and marine mining;

Value Addition, which deals with the further processing of mineral products;

Marketing and Promotion, which deals with attracting investment capital;

Mining Industry and the Environment, which deals with the protection of the environment and with minimising the impact of mining on the environment;

Human Resources, which deals with the human resource requirements of the industry and related social issues;

Research, Development and Technology, which deals with scientific investigations and application of knowledge;

Governance, which deals with the management of the mining sector; and

Regional Integration, which deals with engagement with SADC.

Each of the above sections begins with an overview to introduce issues in the theme and a general policy statement (in *italics*). The sections are subdivided into sub-sections which are presented in three parts: a brief background to introduce the situation or concerns; the government policy statement for the sub-section (in *italics*); and, where necessary, a third part outlining an operational detail.

Each policy statement appears in shaded and indented italics in the sub-section to which it is most relevant. Policy is expressed on the assumption that it will be the responsibility of the Ministry of Mines and Energy for implementation. Where this is not the case, this is expressly stated and the government ministry responsible for its implementation is provided.

Repetitions of certain issues, such as technology and environment, are inevitable in a document of this nature. However, where issues have sector specific characteristics they are captured in the relevant sectors, for example the issues relating to offshore mining are captured in the Marine Exploration and Mining section.

2. THE MINING INDUSTRY

2.1 Overview

Mining is an important sector in the Namibian economy. The sector contributes significantly to GDP, export revenues and government tax receipts. The expansion and development of this sector is, however, constrained by mainly insufficient investment in mineral exploration. Globalisation has impacted on the market for international investments by increasing the levels of competition for financial resources.

The Government of Namibia recognises that the exploration and development of its mineral wealth could best be undertaken by the private sector. Government, therefore, focuses on creating an enabling environment through appropriate competitive policy and a regulatory framework for the promotion of private sector investment coupled with the provision of national geo-scientific data bases essential for attracting competitive exploration and mining.

The Namibian Government has already started a process of revising corporate taxes. The new tax regime will consider the different phases in the life cycle of a mining project. It is envisaged that this process will ensure that the tax regime in Namibia stays competitive when compared to other global mining investment opportunities. The results of encouraging private investment in mining would be the development of infrastructure, generation of employment, and the creation of supportive businesses through smart partnerships. These businesses will enlarge the tax base and the industry will earn more foreign exchange for Namibia.

The opportunities created by effective mining investment include improved skills, development and application of new technology, and potential for value addition as shown in related themes in this document.

Government will promote and facilitate exploration and mining investment.

Government will maintain competitiveness and ensure sustainable benefits for all Namibians.

Government has a role to provide socio-economic infrastructure and will investigate the possibility of supporting mining related infrastructure.

2.2 Medium- to Large-Scale Mining

Since the mining industry is the second largest primary economic sector of Namibia (after government services) and since the country is well endowed with mineral resources, opportunities exist for mining to make an even greater contribution to the economy. The full potential for mineral development has yet to be tapped and for this reason the country requires intensive mineral exploration to be done.

To continue to be a major contributor to the economic development of the country, the mining industry needs to be nurtured to be able to introduce new role players and continue to create new jobs.

2.2.1 Geographic Location

Namibia has many mineral deposits and a good geological potential for further discoveries, with a good geological database and an extensive good infrastructure in terms of power, rail, roads, ports, and communications. There is also an ample labour pool, although with limited skills, which supports any new mining activity.

Namibia's topography generally facilitates accessibility to exploration. However, desert and arid conditions can make mine development difficult and expensive in certain areas. Some areas also lack water for mineral processing and development. The limited or absent local markets can make transportation costs to distant markets excessive. In addition, the local service sector for the mining industry is relatively small, but has access to services within the SADC region.

> *Government will investigate the role of incentives for exploration and mining in remote areas.*

Due to the geographic location of some mines, infrastructure developed during operations can be utilised for tourism development even when such mines are closed.

2.2.2 Exploration and Mining

Mining stimulates economic growth. The ability for growth exists, as Namibia is endowed with a variety of mineral deposits offering potential for further exploration and development. There is a need to increase the ability of the sector to remain a major generator of export earnings and government revenues.

> *Government will promote the exploration and development of Namibian mineral resources.*

This will be achieved through continuous review of incentives including provision of data for exploration and development of mineral resources by the mineral sector in accordance with the Minerals Act.

2.2.3 Land Access

Land in Namibia belongs to private individuals, companies or to Government. Mineral explorers currently have to negotiate a contract with landowners to gain access for exploration or mining purposes. Communities have also expressed a desire to have a share of the fees paid to Government in respect of communal land used for mining purposes. This creates insecurity of mining rights from the point of view of new investors.

The Minerals Ancillary Rights Commission (MARC) offers an opportunity for the implementation of a co-operative and consultative process between mineral explorers and landowners, if disputes arise. The legal framework makes provisions for agreement between

landowners and mineral explorers. In order to further empower the MARC there is a need to develop guidelines to assist in the settlement of land disputes. Moreover, there is a need to stipulate clear guidelines to assist landowners with regard to compensation for land use for exploration and mining purposes.

> *Government will ensure security of tenure through effective legislation and will provide an environment conducive to investment.*
>
> *Government will provide the Minerals Ancillary Rights Commission (MARC) with clear guidelines on the process for access to land and the provision of compensation.*

This will be achieved through Government facilitating a transparent and consultative process between the mining industry and landowners.

2.2.4 Prospecting and Mining in Protected Areas

Approximately 13.6% of the land surface area of Namibia has been gazetted as so-called "Protected Areas" The Areas (which include National Parks and Game Reserves) and National Monuments may have considerable mineral potential, but the unfortunate disregard for the environment that has been shown by some prospectors and mining companies in the past, has resulted in significant adverse environmental impacts. For example, uncontrolled prospecting and mining activities can seriously undermine the character, ecology and tourism potential of parks and monument areas with a resultant increase in opportunity costs for developing this potential.

Following improved co-operation between the different government agencies, significant rehabilitation has already been achieved. A growing environmental awareness, increasingly reflected in legislation such as the Minerals (Prospecting and Mining) Act of 1992 and the Environmental Management Bill currently under promulgation to protect the environment and conserve valuable ecosystems, should improve the situation in these "Protected Areas".

Namibia's parks are the foundation of the country's fastest growing industry, namely the tourism industry. Government must therefore ensure that short- to medium-term projects such as mining do not jeopardize the potential for long-term sustainable development in tourism. However, mining is also important to the national economy and this policy envisages controlled and justified prospecting and mining in these areas under conditions that will satisfy the protection of the environment.

In order to reconcile the objectives of mineral exploitation and environmental protection, it is essential that the negative impacts of prospecting or mining activities on the environment be avoided, minimised and mitigated in accordance with national policy and legislation, and international best practice. Commitments, in respect of prospecting and mining activities, have to be made in line with national policies and strategies developed for environmental protection.

Although a number of mineral concessions in protected areas were granted before the development of the new environmental guidelines, access to these areas is now regulated to protect them against environmental degradation. Subsequently the potential for land use conflict between mining and tourism in "Protected Areas" has been minimised.

Government will ensure that exploration and mining within Protected Areas complies with the environmental and economic regulatory frameworks.

This will be achieved through Government developing improved and clearer environmental assessment processes. The Ministry of Environment and Tourism (MET) and Ministry of Mines and Energy (MME) will ensure that mineral development only commences in these "Protected Areas" when rehabilitation is guaranteed**.**

2.2.5 Mine Closure / Integrated Mine Use

Mine closures can be planned for and should form part of an integrated land use strategy that involves communities. However, there are also occasions when mines are forced to close in an unplanned manner. In such instances, especially where mine owners could not be traced, Government is expected to provide contingencies to deal with the environmental costs associated with closure. Planned closure, in consultation with communities, provides the opportunity to develop alternative land uses through rehabilitation, and to use the remaining infrastructure for other economic purposes.

Before a mining licence is granted, there should be a Final Mine Closure Plan together with a funding mechanism that describes how the company will deal with matters like groundwater pollution, soil degradation, wind pollution and infrastructure.

Government will investigate the establishment of mandatory mechanisms for the funding of Final Mine Closure Plans

Government will monitor mine closures to ensure that the mining industry has mechanisms to rehabilitate closed mines for the purpose of sustained land use.

This will be achieved by ensuring compliance by the mining industry with the approved Environmental Management Plan (EMP) contracts. These contracts should adequately plan for mine closure aftercare and should minimise the negative social effects of closure for example, by providing employees with training in various skills, the development of and support for alternative industries, and the possible use of existing mine infrastructure at closure could be used for other purposes.

2.2.6 Social Responsibility of Mining Companies

A perception exists, in the mineral sector, that there is an unequal or unfair distribution of income, including benefits in the mineral sector between communities and mining companies. To overcome this, this policy presents an opportunity for community engagement. The social responsibility of companies has been considered as a vehicle to meet this challenge. This includes processes that encourage formation of joint ventures; locals receiving preference in allocation of jobs and tenders; and disadvantaged people being assisted by a transparent and enabling environment. Examples of the ways in which the social responsibility of companies

can be practically implemented are capacity building, skills development and the provision of access to knowledge and technology.

> *Government will encourage the mining industry to address social responsibilities through support programmes, training and community participation.*

This will be achieved through interaction between government, industry and the communities to set-up guidelines for social upliftment.

2.2.7 Empowerment

The mining sector in Namibia is dominated by a number of large corporations, which produce diamonds, uranium and base metals. In addition there are several medium and smaller companies producing a variety of minerals. Most of these are foreign-owned. Most Namibians are in the small-scale mining category, mainly one-man operations producing semi-precious stones and industrial minerals.

Currently there is no empowerment focus in any mineral legislation and previously disadvantaged Namibians remain mired in poverty. This position hinders Namibian participation in the mining sector and needs to be addressed. The Minerals Policy poses an opportunity to develop an empowerment framework. It also presents an opportunity for the disadvantaged majority to participate fully in the development of the mining sector and to benefit from it.

> *Government will develop strategies to support Namibian participation in the mining sector to achieve sustainable development and prosperity.*

This will be achieved by undertaking research into the process of setting up empowerment initiatives in mining. These initiatives will aim to make it easier for the disadvantaged groups to overcome impediments to business development in the mining sector.

2.3 Small-Scale Mining

Small-scale mining (SSM) and artisan mining activities have increased significantly worldwide in recent years. SSM is now estimated to include about 13 million people in 30 countries. It has the potential to economically empower disadvantaged groups by virtue of its low investment costs and short lead times. However, much of the economic potential is normally lost. Reasons for this loss include the absence of a legal or fiscal framework for SSM and the rudimentary nature of the production, processing and marketing methods employed.

Nearly all countries in southern Africa have recognised that SSM contributes towards poverty alleviation in the region. An estimated 1.5 million people work directly in the sector and several million more benefit directly or indirectly from it. However, because of the variable, seasonal and often illegal nature of SSM operations, the number of people involved in this sector can only be estimated. In many SADC countries, mining is the only known economic

alternative to agriculture. Employment figures within the sector increase many-fold during the recurrent droughts in the region. More than 50% of those employed in this sector are women and children.

SSM in the Southern African region involves more than 30 different minerals, but it is dominated by easily marketable minerals, such as gold, gemstones and industrial minerals. Artisanal miners concentrate on outcrops, shallow deposits and dumps. Some operations are often carried out at depths that are unsafe for the mining methods in use.

In Namibia the number of small-scale miners is estimated at about 2000 people, mostly one-man operations digging for gemstones. About eighty percent of the small-scale mining activities are done illegally.

Small-scale mining is represented by two organisations namely: the Association of Prospectors and Miners of Namibia and the Small Miners Association of Namibia. The Ministry of Mines and Energy established the Namibia Small Miners Assistance Centre (NSMAC) in January 1997 to provide geo-technical support to SSM. The Minerals Development Fund (MDF), which was established from the system of support to the mining sector (SYSMIN) funding, offers financial support to these miners. The Minerals (Prospecting and Mining) Act of 1992 makes provision for the activities of small-scale miners and the government has introduced a simplified claim registration system for this sector.

> *Government will promote the further development of small-scale mining activities.*

2.3.1 Social

Small-scale mining creates opportunities for employment and encourages entrepreneurship, thus increasing the number of small and medium enterprises. The lack of monitoring of small-scale mining activities can lead to labour malpractice and unsafe mining practices. This can result in health and safety hazards and abuse of children.

> *Government will encourage that small-scale mining operations adhere to good environmental, health and safety standards.*

The Ministry of Mines and Energy (MME) and the Ministry of Environment and Tourism (MET) will achieve this through monitoring and inspection.

2.3.2 Administration

Provision is made in the Minerals Act of 1992 for the registration of mining claims. The Act distinguishes between large-scale and small-scale prospecting and mining activities. It established a simplified system aimed at promoting small-scale mining activities. This simplified system mainly involves the pegging and registering of mining claims. However, the process is centralised and hence is not always readily available to small-scale miners

throughout the country. Decentralisation of administrative and support services could help to remedy this situation.

Mining claims and their registration are currently restricted to Namibian nationals. There is a perception that small-scale miners are not receiving focussed and adequate attention. The provision of permits of short-term duration, as well as the inadequate monitoring of the small-scale mining sector, is seen as a weakness. The under-development of the mining claims system and increasing incidents of illegal mining are seen as threats to the mining sector.

> *Government will investigate the most cost effective and efficient methods for the claim registration system for small-scale miners.*

2.3.3 Economy and Marketing

There are a number of inherent weaknesses in the small-scale mining sector. These include a lack of finance, structured marketing systems and marketing information. These problems are aggravated by the theft of minerals and transfer pricing. They result in a loss of revenue to Namibia and make the small-scale mining sector unsustainable.

Financial support for small-scale mining includes the Minerals Development Fund (MDF), while technical support is available through the relevant structures of MME. It is possible to acquire funds from existing bilateral or multilateral agreements in support of the small-scale mining sector. Although avenues of funding do exist, it is not possible to support non-viable projects. The formation of small-scale mining co-operatives offers opportunities for the development of organised schemes, such as buying and marketing of mineral products. The currently under-utilised tourism industry also provides an outlet for the marketing of their products.

> *Government will continue to provide loans to viable small-scale mining projects through existing and future financial structures.*

This will be achieved through Government support of the establishment of co-operatives and marketing centres.

2.3.4 Environment

In order to undertake mineral prospecting and mining operations, small-scale miners are expected to adhere to an environmental contract. This provides an opportunity to create environmental awareness and to train miners through the dissemination of information. The process of issuing environmental contracts needs to be streamlined and speeded up. Inertia in the processing of environmental contracts delays the commencement of mining operations, while non-compliance with the provisions of the contracts results in inadequate rehabilitation and possible long-term environmental damage.

Government will ensure compliance by small-scale miners with environmentally acceptable mining practices through regular monitoring.

This will be achieved by MME working in close co-operation with MET to effect efficient processing of environmental contracts. However, and importantly, MME and MET will implement a system to monitor compliance with Environmental Contracts. Government is also committed to actively supporting environmental awareness programmes in small-scale mining communities and will further promote, through meetings and regular visits to small mining sites, awareness of the environment and of the potential adverse effects of mining operations. Small-scale miners are obliged by law to ensure that safety is maintained in their operations.

2.3.5 Technology and Human Resources

There are small-scale mining support centres in place to assist miners in the development and implementation of appropriate technology. Co-operatives offer an additional vehicle for securing funding for the development and application of technology to small-scale mining. At present, business skills and innovative developers of technology in the small-scale mining community are both inadequate. Research and Development (R & D) can result in new products being produced using local materials.

Government, through relevant organisations and other institutions, will provide technical assistance and information to small-scale miners.

The Government will encourage the development of appropriate technologies for small-scale mining and provide skills training for small-scale miners.

2.4 Marine Exploration and Mining

Namibia has a wealth of marine mineral resources, such as glauconite, phosphorite, industrial minerals and diamonds. The exploration and development of oil and gas marine resources are fully captured in the White Paper on Energy Policy of 1998.

The potential for discovering diamonds on the sea floor was recognised as early as during the German colonial period. However, technical difficulties at the time prevented any attempt to recover stones from the seabed. In 1961, mining of shallow-water marine deposits was initiated at Chameis. Mining efforts were moved to Hottentot's Bay in 1969, but ceased in 1971 due to the depletion of the then known reserves. Between 1970 and 1983 marine exploration and prospecting established a large, low-grade diamondiferous deposit on the continental shelf. Today offshore diamond mining is carried out by a number of companies.

Namibia has the richest marine diamond deposits in the world, with an estimated resource potential of over 1.5 billion carats. Marine diamonds accounted for 60% of Namibia's total diamond production in 2001. The increase in marine diamond production was a response to the

dwindling on-shore diamond reserves as well as to the development of new exploration technologies. With on-going research and further improvements in technology, marine diamond production is likely to increase.

The offshore environment is also important to other sectors of the Namibian economy such as energy and fisheries. The increase in offshore activities is associated with negative effects on the environment. Since offshore development in exploration and mining is a relatively new activity the associated impact on the environment is not yet fully understood. Therefore, there is a need for continued on-going research into the probable environmental impacts. Technological advances and environmental management are both key to obtaining the maximum contribution from the natural resources to the economy.

Government will enact a legal framework to facilitate sound marine exploration and mining activities.

2.4.1 Social

There is a limited number of skilled Namibians in the marine mining sector, which results in employment practices that favour foreigners. In addition, local goods and services are not being used by the marine mine operators partly because some coastal towns lack adequate social infrastructure.

Government, in partnership with marine mining companies, will ensure that Namibians are developed in marine mining skills.

Marine Mining Operators (MMO's) will be encouraged to have programmes, which provide multi-skilled training and also contribute to sustainable social upliftment and infrastructure development (with emphasis on the west coast of Namibia). The use of local goods and services by MMO's will also be encouraged.

2.4.2 Technology

Offshore mining methods, geo-survey and sampling techniques, as well as processing technologies need to be continuously updated to maintain Namibia's competitive advantage.

Government will encourage investment in Research and Development in marine exploration, extraction, processing, and waste disposal technologies.

2.4.3 Environment

The environmental constraints in the marine mining sector are threefold:- inadequate co-ordination among the relevant ministries – the Ministry of Fisheries and Marine Resources (MFMR), the MME and the Ministry of Environment and Tourism (MET); lack of co-ordinated environmental research to assess the long-term environmental impacts by marine mining activities; and an absence of formal Environmental Management Programme Report (EMPR) guidelines.

> *Government, in consultation with stakeholders, will develop a framework for the generation of Environmental Management Programme Report guidelines.*

To achieve this, the MME, in consultation with the MET and MFMR, will be responsible for approval of mine areas and schedules. In order to avoid cumulative and collective damage to the environment, all vessels should comply with the prerequisite of being equipped with Vessel Monitoring Systems (VMS). The MME and relevant stakeholders will establish an Environmental Assessments Working Group consisting of licence holders and relevant ministries to develop environmental management guidelines, including EMPRs.

3. VALUE ADDITION

3.1 Overview

At present the amount of mineral beneficiation in Namibia is very limited and the country exports most of its minerals in raw and semi-processed forms. The advantages of adding value to minerals are obvious: they include increasing national economic activities and improving state revenue, reducing the need for imports, improving the skill level in the minerals industry and widening the employment base. Namibia's extensive mineral endowment makes it a good candidate for further processing of minerals, though the country faces a number of problems to this end. These include a shortage of local capital, especially risk capital; scarce fresh water supply; a shortage of technical skills; long distances between the mineral deposits, markets and export destinations; and the usually large size of operations.

Mineral beneficiation can cover the whole range of processes from basic ore dressing, such as handpicking or crushing and screening, through to the manufacturing of final consumer goods, such as automobiles. Beneficiation may also include recovery and recycling: but where a mineral has to undergo initial processing in order to make it saleable, for example the production of gold bullion at the Navachab mine and of yellowcake at Rössing Uranium mine, these stages are not usually considered to be value addition in the national economic sense. At the other end of the scale, the production of finished consumer goods is usually considered to be beyond the scope of the mining sector and is included in the manufacturing sector.

A good measure of the degree of processing across the total mineral output is the value of processed minerals produced. For Namibia this was in the order of N$300 million in 1998 (not including cement) or 17% of raw mineral production. In comparison, the value of processed minerals produced in South Africa was N$28 billion (excluding gold, but including steel) or 37% of mining production value.

A wide array of products can conceivably be made from minerals mined in Namibia, ranging from antimonial lead for storage batteries to zinc-based fireproofing chemicals. The importation of raw materials from abroad for processing in Namibia (as is done in South Africa and Mozambique, which smelt alumina imported from Australia to produce aluminium) requires additional advantages, such as cheap electricity.

Mining in general, with the exception of salt, deals with non-renewable resources. Therefore, at some point in the future the contribution of mining to the economy will decline once the known deposits are exhausted. Yet Namibia is not realising the full benefits of these resources. At present, other countries make greater profits by importing and processing Namibian raw materials to produce the value added products that they then again export. For example, a potential 1-carat diamond may have a value 400 times that of a corresponding rough diamond. Trade barriers, including tariffs and non-tariff restrictions are among the factors limiting Namibia's share of markets for processed minerals in industrialised centres.

Government will further explore opportunities for the promotion of value addition.

Government will encourage and facilitate local manufacturing under the concept of "Mined and Manufactured in Namibia".

3.2 Social Aspects

A major problem for the minerals processing industry in Namibia is a critical deficiency of the necessary skills. As a result, the personnel required in the Namibian operations, such as metallurgists, electrical engineers and trained technicians, are mostly filled by expatriates. Value addition operations often require the introduction of new technology, including automation, which intensifies the demand for expatriate skilled labour. This situation presents the potential for tension and conflict in the labour market and needs to be solved amicably.

There are also insufficient facilities in the Namibian industry itself for providing training in the necessary skills. Insufficient involvement of adjacent communities in value-addition projects is another area of concern. A lack of involvement prevents communities from buying into projects and from sharing the benefits and can result in resistance to developing value-addition operations. While projects for adding value are often relatively large, small value-adding operations are also not sufficiently developed.

> *Government, in conjunction with relevant stakeholders, will identify skills deficiencies for value addition and promote measures to address them.*

This matter is further addressed in section 6 on Human Resources.

In addition the Government will ensure community participation through consultation before companies are allowed to commence metallurgical operations. Furthermore the Government, in partnership with industry, will ensure the dissemination of information to and consultation with stakeholders to address this issue.

Government will also develop and implement plans for a sustainable small-scale value-addition industry to address the problem of the size imbalance referred to above.

3.3 Economic Aspects

Local sources of risk and venture capital are limited for mining-related projects. This particularly affects value addition projects because of their intensive capital requirements.

The limited internal market for value addition products provides an additional constraint on these projects. International trade restrictions that exist on some products, especially assemblies and sub-assemblies, could limit certain value adding activities in Namibia.

> *Government, in conjunction with financial institutions, will investigate the financial constraints on the development of value addition industries.*

This will be achieved by the active promotion of the establishment of a special facility in the Development Bank of Namibia for value addition projects in the minerals industry.

Government is committed to investigating measures to encourage investment in value addition projects through the Namibian Stock Exchange and will intensify its support of regional efforts to eliminate adverse effects of international trade restrictions.

3.4 The Environment

Currently there are no legal requirements for the submission and approval of Environmental Impact Assessment (EIAs) and Environmental Management Programme Reports (EMPRs) relating to the value adding industry. Nevertheless, environmental specifications can be a constraint in specific cases and can create problems for developing countries, as they attempt to comply with international standards.

The Basel Convention and other conventions relating to protecting the environment also limit the development of value added projects in some cases, for example where raw materials classified and imported as input materials by developing countries are designated as waste by developed countries.

> *Government will implement effective environmental monitoring systems to ensure compliance with Environmental Management Programs for value addition activities in line with international best practice.*

This will be achieved through further co-operation within SADC and negotiating with the parties to the Basel Convention and the secretariat of the Convention to allow the export of waste materials, where these materials are needed for resource recovery, recycling, reclamation, direct re-use or alternative uses and where the treatment of the materials is performed in an environmentally safe manner.

4. MARKETING AND INVESTMENT PROMOTION

4.1 Overview

The global mining industry is fundamental to the development of industrial economies. Namibia can participate in the benefits of growth and higher productivity and enjoy higher standards of living through trading in mineral commodity products, as well as in finished goods and related services. This can be achieved if investment is made in exploration for new mineral deposits to replace old mines and in mine development to satisfy both local and foreign markets.

Radical changes in the global economic environment have resulted in fierce competition between developing countries to attract foreign investment. Developing countries have embarked on wide ranging structural reforms to be competitive. These reforms have included privatisation, providing various incentives, improving environmental, health and safety practices, enacting new mining legislation and instituting investor friendly regimes.

The global industry has witnessed a large number of mergers reflecting the increasing globalisation of mining investment. These mergers resulted in the number of mining companies decreasing, although the output of many mined commodities has increased. Since the early 1990's a general trend towards a more open and competitive investment environment prevailed globally, as economies are liberated and move towards becoming market driven.

For mining companies it is of utmost importance to ensure that all possible parameters influencing the economics of mining and processing are evaluated prior to investment. In addition large corporations pay significant regard to political stability, the local investment climate, the royalty and tax regime, local mining and labour laws, the quality of labour, and the availability of good infrastructure. If attention is not given to these issues by host countries, investment moves to competitors elsewhere.

Compounding the fierce global competition for mining investment is the fact that, like many developing countries, the domestic private sector does not have the financial resources to meet the level of capital requirements typical of mining projects. In addition, the domestic capital markets are not sufficiently developed for this purpose.

The Namibian Constitution and a solid legal foundation, such as the Minerals Act of 1992, have been laid down to secure investment in the mining sector, however, more needs to be done to create a secure investment environment needed for the proper development of the mining sector.

Government will promote and encourage investment in the mineral sector through effective global marketing of this sector.

4.2 Capital Markets and Promotion

Current developments towards co-operation between stock exchanges in the SADC region auger well for mobilising mining investment. The Namibian Stock Exchange could also assist in linking investors with projects in the minerals sector and act as a vehicle for attracting investment from the large capital markets outside the Southern African region.

There are also opportunities for junior mining companies to be mentored by the existing large mining companies. However, although funds are available for investment, the majority of investors are reluctant to fund small mining projects of the junior mining sector, as they perceive this to be a high-risk area due to its low skill base.

Other disadvantages include inadequate competent financial mining analysts, the absence of a local mining investment culture and the current Investment Centre has not been geared towards mining. When these type of circumstances prevail, available sources of funding might be diverted to other more feasible sectors. An external factor that could also adversely affect investment is any regional political instability, which could sterilise the development of the mining potential in Namibia.

A vehicle that could be used to promote the Namibian mining sector is the SADC Biennial Investment Forum. The strength of the Namibian mining industry such as the availability of complete geophysical data and a well-developed exploration, reporting and relinquishing system could be presented to investors at this forum. At this Investment Forum and other international forums the activities of the Chamber of Mines (COM) could be expanded to promote and market the Namibian mining sector more. Other international forums also present an opportunity for promoting the Namibian industry, especially with emphasis on its recent and past successes. The advent of e-commerce also offers an opportunity for Internet marketing.

At present there is a lack of public awareness in Namibia about the benefit of mining to the economy of the country, and there is little formal promotion of the industry. Other factors that inhibit the marketing of the minerals sector include the confidentiality of geological data held in the private domain, which prevents its wider use and the inadequate institutional support for marketing.

> *Government will create a capacity that is properly resourced to undertake mineral promotion and marketing activities.*

This will be achieved by the proactive marketing of investment opportunities for Namibia globally by Government.

Government is committed to developing institutional capacity to gather, analyse and evaluate geological, mining, economic, market potential and other information necessary to the promotion of potential mining projects, including information developed by the private sector in project feasibility studies and proposals.

Government is also committed to utilise and expand the MDF to assist mining companies to establish viable projects.

5. THE MINING INDUSTRY AND THE ENVIRONMENT

5.1 Overview

Environmental issues in mining have gained prominence in recent years. These began to emerge in the developed mining economies, such as Canada, where stringent environmental policies and regulations have been in place for over a decade. Similarly, emerging markets such as those in the SADC region have begun to pay attention to environmental concerns particularly pertaining to mining. This is partly because of the need to benchmark against international best practice in order to make the SADC region more investor friendly.

International '*watchdog'* organisations, such as environmental NGO's, publicise poor environmental practices worldwide and this normally acts as a deterrent to investment in countries that do not uphold acceptable environmental standards. Even multilateral organisations such as the World Bank emphasise environmental best practice when allocating their funds. Furthermore, the World Bank is in the process of developing best practice environmental guidelines, which may in the near future regulate access to international money markets in respect of mining projects. The emergence of tourism as a major sector in recent years has also caused governments and policy-makers to pay more attention to protecting their environments.

While mining forms a very important part of the Namibian economy, it also has contributed to major environmental degradation. At present there are over 240 abandoned mine sites where the responsibility for rehabilitation now rests with the State. Larger mining houses have the potential to enforce major environmental policies and practices.

With respect to current and future operations, there is a need for appropriate legislation to regulate the environment in mining. There is also a need to rationalise the various government departments concerned with environmental issues. Although mineral licences may be granted on time, there is an inconsistency in the speed at which EA/EMP are approved.

> *Government will ensure that the development of Namibia's mining industry proceeds on an environmentally sustainable basis.*

By defining clear mechanisms for the funding and management of environmental rehabilitation and of environmental trust funds, a new chapter could be realised in mining activities in Namibia. This should create a clear role for the regulatory authority, the Ministry of Mines and Energy, to give guidance to the operators, both prospectors and the mining companies.

5.2 Effective Environmental Management

There is little effective environmental management within the Namibian mining industry. This is the result of inadequate co-ordination between the MME and the MET in relation to environmental legislation; a lack of public awareness, capacity weaknesses and education programmes focussed on environmental issues; the absence of an environmental budget, and the public antagonism towards mining activities because of its negative effects on the

environment. The problem is compounded by the fragmentation of environmental capacity throughout the various Government Ministries.

Despite these obstacles, there is an opportunity to level the playing field for all the stakeholders, and to develop a sustainable mining sector through the establishment of harmonised environmental standards.

> *Government will enact exploration and mining legislation benchmarked against environmental global best practice.*

In the short term, this will be achieved by re-structuring in the MME to create appropriate structures to be responsible for Mining and Environmental issues. The MME will also co-operate and co-ordinate its endeavours more effectively with the MET and other stakeholders in implementing environmental policy.

5.3 Environmental Rehabilitation

Environmental rehabilitation offers the opportunity to sustain land development and use, and reduces the burden on the taxpayer to fund the rehabilitation of abandoned mines. Rehabilitation based on the '*polluter pays*' concept should ensure protection of the environment both during and after mining operations.

The high cost of rehabilitation necessitates clear funding mechanisms for environmental rehabilitation, management and control. At present few such mechanisms exist in the mining industry.

> *Government will ensure compliance during rehabilitation with national policies and guidelines, and where appropriate and applicable, with global best practice.*
>
> *Government, with relevant stakeholders, will investigate the establishment of financial mechanisms for environmental rehabilitation and aftercare.*

These will be achieved through the development and implementation of internationally benchmarked Environmental Trust Funds or Bonds, which should be driven by the MME, the COM and other stakeholders.

5.4 Waste Management

Most mining companies have systems in place for the disposal of waste. The implementation of industry good practice, however, is very fragmented. There is both a lack of guidelines to control the disposal of waste and a lack of capacity to police the process.

The implementation of a waste management policy is often perceived as adding to the costs of mining operations. However, a waste management policy presents the country with the

opportunity to achieve effective protection of the environment through the promotion of acceptable environmental standards.

> *Government, in consultation with the mining industry, will develop waste management standards and guidelines for Namibia.*

5.5 Health and Safety

The new draft Mine Health and Safety Regulations are in place, while the process of amending the Minerals Act of 1992 is in progress. The absence of a revised mining legislation means that the new Mine Health and Safety Regulations cannot be gazetted and enforced.

The existing Mine Safety Regulations are not adequately enforced. This is attributed to the critical shortage of qualified and experienced mine inspectors.

In general, safety is perceived as having cost implications.

> *Government will ensure that the mining industry complies with the Mine Health and Safety Regulations.*

In linking up with NOSA-Namibia, the Government should create a health and safety culture in the mining sector. This will improve and create conducive working conditions, prevent accidents, and reduce loss of life through mining operations.

6. HUMAN RESOURCES

6.1 Overview

The mining industry in Namibia is one of the major employers, despite the decline in employment from about 12 300 in 1993 to 6 165 in 2001. The country is facing shortages of skilled professional and technical personnel in mining related fields, in all categories and at all levels.

In a survey undertaken in 1996, the United Nations Economic Commission for Africa (UNECA) confirmed the critical skills shortage in both the public and the private sectors. Of particular note were the shortages of mining engineers and geologists in government and both professionals and artisans in the private sector. Across the sector core skills are needed in the following fields:- geology, mining engineering, mineral processing, metallurgy, mineral economics, mine surveying, chemistry, environmental science and mineral policy and investment analysis. Additionally, technician-level skills, such as mining and mineral processing technicians, geo-technicians, laboratory technicians and mine surveyors are required. The 1996 UNECA report noted that most of the professionals in the private sector were expatriates and that the Namibian mining sector needed to develop a skills base within the country to meet both its short- and long-term needs.

Human resource development is critical to the development of the Namibian mining sector. In response, therefore, the government took a number of initiatives to develop the skill base in the sector. It passed the Affirmative Action Act in 1998, which requires all companies to submit an affirmative action plan. This aims to rectify racial and gender imbalances at all levels in all organisations. Other initiatives included the setting up of a geology department at the University of Namibia, the establishment of the Namibian Institute of Mining and Technology by the Rössing Uranium mining company (which was donated to the Government at Independence) and the Polytechnic of Namibia.

The Polytechnic of Namibia runs courses in the fields of mechanical engineering, information technology and environmental conservation to name a few. In addition, the government launched and established Vocational Training Centres, which were designed to provide hands-on training, and develop and produce artisans. In 1999, the centres had a total of 1 378 students studying towards a National Vocational Diploma.

Despite these efforts, the current situation remains disadvantageous. Some 50% of professional posts in government remain unfilled and industry is struggling to appoint suitably qualified personnel. The problem is further compounded by the fact that Government institutions take time to process work permit applications, making it very difficult to import the required skills from other countries.

The above issues require a well-coordinated policy intervention, which addresses the short-term, medium-term and long-term human resource objectives of the industry.

> *Government will encourage and facilitate the development of human resource skills to meet the ultimate requirements and challenges of the mining sector.*

6.2 Training

A well-established educational framework and facilities, together with budgetary support by both the public and private sectors, has improved the literacy level of the country. The availability of in-house training programmes on mines encourages the development of a trained workforce. The integration of available training programmes together with the implementation of the Affirmative Action (Employment) Act provides the opportunity for the accelerated development of personnel and career promotions.

The sophisticated technological nature of modern mining offers ample opportunities for the multi-skilled training of human resources working in this sector, which make the mining sector more attractive for employment.

A major weakness in the training of people for the mining sector is the small number of science students in the secondary schools in Namibia. There is also an unhealthy dependence on donor funding for training programmes and support services by Government.

The potential brain drain together with an inflexible temporary work permit and resident permit regimes requires urgent attention. In addition, training programmes could be further improved through the use of facilities available in the SADC region.

Another issue is the grassroots training of people in land use matters. Small- scale miners, individual miners and other stakeholders, who directly benefit from mining, should be trained in issues of land use.

> *Government will encourage the mining sector to promote and support training for careers in mining through the provision of bursaries, in-house training and apprenticeships.*

The MME will provide general information and guidance on career opportunities and educational paths in mining to enhance knowledge of training opportunities. A tripartite consultative process between the MME, the academic institutions and industry will determine requirements and the delivery of the quality of training programmes. Career opportunities could be broadened through the utilisation of SADC facilities and integrating local training programmes with SADC training programmes.

Where necessary the Government will encourage the employment of regional and international experts to train local personnel. Government recognises the need to relax the work permit regime to bring in specialised instructors and trainers, who would train Namibians in the relevant fields.

The industry will promote and encourage co-operation among companies with regard to the use of in-house multi-skilling programmes. In addition, Government will enforce compliance with the Affirmative Action (Employment) Act, in terms of skills transfer and the development of personnel. Government will also examine the possibility and desirability of sharing the costs of training with various stakeholders. Mining companies will be encouraged to provide the necessary training support when outsourcing activities to small companies.

6.3 HIV / AIDS

Although there is a general awareness and openness about HIV / AIDS issues, and although some large mining companies are addressing the problem in their workforce, there is at present no overall national policy on HIV / AIDS. In 1998 the Government published guidelines for implementation of national code on HIV/AIDS in employment. There is a need to put in place a long-term plan and a policy, that are linked to the Ministry of Health and Social Services, to provide better health care and education through the creation of an HIV / AIDS fund. A lack of effective measures to address this pandemic will result in depletion of the labour pool, a reduction in productivity and the necessity for training of new people.

In addition to the Namibian Government's addressing the problem of HIV / AIDS nationally, the mining industry has developed a programme to improve AIDS awareness, health care and delivery practices. Traumatised communities, increased social demands and changes in social structure aggravate the problem, while the loss of skills will destabilise the sector.

> *Government will actively support the implementation of a National HIV / AIDS Policy and encourage companies to adopt the policy.*

The MME will actively encourage companies to provide for continuous skills training and to create a family-orientated community environment for employees of mining companies.

6.4 Specialised Mining Services

Specialised mining services are available in the SADC region whereas the local base is limited. However, there is a perception that the small economic base of Namibia together with its geographical location inhibits easy access to this regional pool of services. To obtain access to these specialised services from the region, easy and non-bureaucratic processes need to be put in place.

> *Government recognises that not all specialist-mining services are available in Namibia and will facilitate short-term employment of such services, where necessary.*

6.5 Affirmative Action

Mining is one of the major job creating sectors in Namibia. Various existing laws, such as the Employment Act, encourage affirmative action in job provision. The term "*affirmative action*" suggests that measures be taken to ensure that suitably qualified people from disadvantaged groups have equal opportunities and are equitably represented in all occupational categories and at all levels in the workforce. Affirmative action in this sense is used as a tool of social policy in many countries and is endorsed in international human rights conventions.

Government will ensure that the mining industry complies with legislation to ensure equal opportunities for all Namibian citizens.

Government will ensure that, with due regard to efficiency, economy and practicality that the mining industry gives preference to the employment of Namibian citizens who possess appropriate qualifications, expertise and experience. Non-Namibian citizens will only be employed where the expertise and experience required for operations cannot be obtained in Namibia. This will ensure the advancement of people in Namibia who have been socially, economically or educationally disadvantaged by past discriminatory laws or practices.

6.6 Gender

There have been a number of initiatives, such as those by the Ministry of Women Affairs and Child Welfare and in the Labour Act, that encourage women to participate in the mining sector. In addition, there are several formal financial support mechanisms for this purpose. However, mining companies are not fully complying with the regulatory framework in this regard due to the harsh nature of mining activities, which disallow a good gender balance.

Government will ensure that the mining industry complies with the National Gender Policy.

By creating awareness of opportunities for women in mining, it is possible to bring more women into the sector and, at the same time, address unemployment in the country.

There is also a need to address the perceived traditional role of women in rural communities, which prevents many women from joining the mining industry.

7. RESEARCH, DEVELOPMENT AND TECHNOLOGY

7.1 Overview

Scientific knowledge is the pillar on which sustainable societies are built. It is one of the conditions for the observed economic growth of economically developed countries. Our knowledge of the resources in the world around us and our ability to find and utilize them, forms the basis for a good standard of living for all. In today's world, increasing populations and the ever-increasing demand for a better quality of life for all citizens, are putting an exponential strain on the limited resources. To ensure any prospects for future generations, sustainable development has become a first and foremost task.

Geological knowledge should be a readily available, and applicable component in the infrastructure of every society. It is a precondition for taking informed decisions on a range of important issues, which may have broad economic and/or social implications.

Technical capacity is also an important condition for maintaining a competitive mining industry. Continued competitiveness and sustainability of the Namibian mining industry will be determined by the ability of the country to maintain the use of new and efficient technologies. Worldwide, the overall economy has shifted from one driven by the primary and natural-resources-based sector to one in the tertiary sector. This development is also evident in Namibia, where value adding is encouraged to enhance the creation of wealth.

> *Government will encourage, promote and invest in Research and Development, as well in new Technology in search of innovative solutions to the challenges in the mining sector.*

7.2 Research and Development

The application of earth sciences in supporting wealth creation, quality of life, and laying the foundations for a sustainable future is of ever-increasing importance for Civil Society. National Geological Surveys, such as the geological Survey of Namibia play a pivotal role in both, basic geo-scientific research and its application. The Namibian geology poses quite a lot of challenges at grass roots level, and continuous research needs to be done to ensure a well-orchestrated support to new mining ventures. In this vein the Geological Survey of Namibia has been instrumental in supplying the necessary information regarding the minerals base of the country.

Secondly, technical capacity is an important precondition for maintaining a competitive mining industry. The continued competitiveness and sustainability of the Namibian mining industry will be determined by the ability of local institutions, including the Geological Survey of Namibia, to maintain the use of new and efficient technologies. Worldwide, the overall economy has shifted from one that was driven by the primary and natural-resources-based sector to the tertiary sector. This development is also evident in Namibia, where value adding is encouraged to enhance the creation of wealth. The demand for Geological Survey products has, therefore, changed to thematic geological information, including added intelligence in the form of interpretation, being high in demand.

Institutions in the country need to generate information and knowledge to transform natural resources into goods and services for the improved and sustainable quality of life of Namibians. Some of the areas of focus are:- grassroots research on the mineral base of Namibia; basic research to provide more efficient small-scale mining sector technologies leading to better returns and sustainability of the sector; application of science and technology to add value to mineral products; and developing the capacity to link scientific knowledge on geological resources to policy and long-term planning of natural resource-exploitation initiatives.

The mineral processing industry in Namibia suffers from the lack of a coherent national system for innovation aligned to business requirements. This is exacerbated by the insufficient co-operation or non-co-operation between business and government to produce a competitive technology environment. In addition, the limited research and development performed in Namibia and the lack of research facilities are constraints on the adaptation of technology in the country.

> *Government will promote the establishment of a National System of Innovation.*
>
> *Government will facilitate the generation of both fundamental and applied knowledge through a collaborative system between public and private research institutions.*

This will be achieved by co-operation between the Ministry of Mines and Energy and the Ministry of Higher Education in partnership with the mining industry to explore support programmes that will fast track initiatives in exploration, value addition, skills training, and research and development.

7.3 Technology

The mining industry throughout the world has supported the development of a number of critical technological innovations. This has reduced mining and processing costs, extended the range of ores that can be recovered and improved safety and productivity. It has maintained or extended the viability of mining operations for a number of commodities and slowed the decline of others. Although some technological innovations have decreased the demand for labour, they have generally safeguarded jobs by maintaining the viability of the operations concerned. The process of technological innovation has brought about a change in the labour market from an unskilled, uneducated work force to that requiring technical ability and improved education.

Some technological innovations have been developed in Namibia, while others have been adapted for use in this country from foreign sources. Namibia is, for example, the world leader in the technology for offshore diamond exploration, reserve assessment, mining and onboard processing. The Namibian Minerals Development Fund provides financial assistance to viable projects for the development and adaptation of mining technology for small-scale mining operations, and the Namibian Small Miners Assistance Centre within the Ministry of Mines and Energy provides geo-technical support to the small-scale miners.

The application of advanced technology, developed elsewhere for use in Namibia and other countries, will accelerate as a direct result of globalisation. Developments in technology also apply to safety, health and environmental issues: in this case non-tariff protection of markets in industrialised countries may incorporate demands for its application in the exporting country. An example is the automated roof-bolting equipment that is deployed in underground mining operations to enable entry into previously unsupported ground.

The degree to which processing technology is available is one of the factors that determines to what level value can be added to the minerals mined. Any strategy for value addition in Namibia has to take into account the need to either develop new or access existing technology. In cases where processing technology is available, access to the technology could be denied, either because Namibia may be seen as a future competitor or because the technology is seen as strategically important to a country. In instances where the technology does not exist, there is an obvious opportunity and this is an area where Namibia should focus.

Greater use of information technology is needed for improved networking and data processing. The Geological Survey of Namibia recognises the challenge of serving the needs of society by utilizing geological resources and geo-scientific knowledge effectively. This includes scientific challenges as well as data management using new technologies for information and communication. Networking plays an important role for interdisciplinary research, and integration of information at local and global levels. Products must be relevant to the problems with which the exploration and mining community is concerned. The focal point, therefore, is to synthesize the available and new geo-scientific information into thematic products, which directly meet the changing needs of society.

In the long-term there is a need to address beneficiation issues from a local and regional perspective. The value addition industry has a small skills base, as does the whole of the mining sector in Namibia.

Government will support and encourage the mining industry to undertake Research and Development of new technologies.

Government will support and encourage the mining industry to apply new technologies.

This will be achieved through the public and private mining sector developing linkages and continued active participation in SADC mining sector initiatives and programmes of work.

The Geological Survey will encourage and continue to undertake various survey programmes, including first level interpretation. MME will secure enough funds from Government and donors to maintain a functional and professional Geological Survey and will continue to provide technical services, including geological information to the small-scale mining sector.

The Ministry of Finance (MF) will consider tax incentives for R & D into local beneficiation opportunities. MME will encourage and enhance training in scientific and technical skills.

8. GOVERNANCE OF THE SECTOR

8.1 Overview

The MME has five directorates, namely: Mines, Geological Survey, Energy, Diamond Affairs and Administration/Finance. The MME works closely with the Ministry of Environment and Tourism (MET) for environmental assessments and management programmes and with the Ministry of Agriculture, Water and Rural Development in connection with the administration of the Water Act.

Other ministries that affect the mineral sector and work with the MME are Fisheries and Marine Resources, Finance, Home Affairs, Labour, Trade and Industry, Office of the President (National Planning Commission) and the Ministry of Lands, Resettlement and Rehabilitation.

> *The Ministry of Mines and Energy will be responsible for coordinating the effective governance of the mining sector.*

8.2 Integrated Land Use Planning

Integrated land use planning could minimise conflict while ensuring the sustainable use of land. There is, however, a general lack of understanding and knowledge of integrated land use planning, as well as a lack of co-ordination within government departments, including at local and district levels.

Excessive bureaucracy and the time required for co-ordination among government departments are threats to land-use planning and can be very costly. In addition, there is insufficient capacity in the government departments to implement an integrated land use planning system.

> *Government will create a mechanism to ensure co-ordinated land use and development.*

Potential land-use conflicts will be resolved through the Environmental Impact Assessment (EIA) process. Stakeholder meetings will be used to reach consensus on the way forward.

8.3 The Legislative Framework

The Government is committed to providing a modern and efficient legal framework within which the mining sector can develop optimally. The Minerals (Prospecting and Mining) Act 1992 is the law that governs exploration and mining in Namibia. This Act, which was enacted immediately after independence to address the injustices of the past, is presently undergoing a full review by the MME in collaboration with the Chamber of Mines and other stakeholders.

Government will constantly update the legal framework to be in line with global best practice.

The Government will also expedite the amendment of the current legal framework to be in line with this Minerals Policy. It will streamline the many legislative measures and existing procedures that impact on mining. These will include the procedures for the granting of various exemptions.

The MME will improve communication and co-ordination through the development of a '*one-stop shop*'.

The MME will support the enacting of environmental legislation that allows the MME to take ownership of the process, where it involves the mining industry.

8.4 Corruption

Namibia is seen as one of the least corrupt countries in Africa. This is achieved through providing competitive remuneration packages and implementing well defined, controlled disciplinary procedures. Unless these procedures are maintained there is a possibility the country could slide down the corruption index resulting in the reduction of investor confidence.

Government and the mining industry will actively support compliance with Namibian anti-corruption measures.

This will be achieved by adopting laws that provide minimal discretionary powers to officials implementing the Minerals Act, while ensuring that procedures are transparent. In addition Government will strengthen its Code of Conduct on Corruption and set appropriate penalties for corrupt officials. Stringent legislative measures will be taken to ensure that corrupt companies are also brought to book.

8.5 Political Stability

It is recognized that the Namibian Government is seen as being democratic, maintaining a multi-party system, a free market economy and a free media system. This is in contrast to other regions in Africa. This political stability can be used to attract new investment into the mining sector.

Government will continuously strive to maintain a stable political environment through a democratic system.

9. REGIONAL INTEGRATION

9.1 Overview

Namibia is a member of the Southern African Development Community (SADC), which was created by a treaty signed in Windhoek in 1992. The Treaty establishing SADC was intended to lead to deeper and higher levels of co-operation and integration among member States who agreed to common approaches to the formulation and execution of policies, strategies and programmes.

The Namibian Government acknowledges the benefits of regional initiatives and is participating in many programmes under the SADC umbrella. In addition the world is amalgamating into economic blocks particularly on trade issues.

The southern African region is rich in mineral resources. The role that minerals play varies from country to country depending upon mineral endowment and activity. In general, minerals contribute significantly to the economies of the region. The mining sector is viewed as a base for development even in those countries that do not have a mining tradition.

The state of development in each country in the region makes it rather problematic to use mineral resources to their full potential to provide the impetus for economic growth. Minerals can lead to the sustained development of the region if common strategies are developed and implemented. Currently strategies that are being developed and followed include harmonisation of policies, development of skills and training, and utilisation of existing institutions. Other strategy developments include those for small-scale mining; developing regional funding avenues; formulating and implementing strategy and programmes for value addition; a regional information strategy to promote investment; and rationalisation of R&D facilities.

> *Government is committed to the implementation of the SADC Treaty and the SADC Mining Sector Protocol.*

9.2 Regionalisation

There are many opportunities for Namibia to benefit from SADC, which could be used to bargain through the following initiatives:- benefiting from more developed economies, information sharing, having one voice from a united group, skills and technology sharing, and financing of developments.

> *Government will, in consultation with stakeholders, take up a proactive role in developing regional policies and initiating timely implementation thereof.*

9.3 Technology and Human Resources

Since countries vary in their stages of development, there is a perception that countries with stronger economies will dominate decisions at the regional level. Although this has not materialised in the past, there is a danger that the relaxation of migration laws might result in the free movement of less skilled personnel.

> *Government will promote a uniform approach to Technology and Human Resource policies so that mining related educational and research institutions can be fully utilised.*

9.4 Sharing of Facilities

The regionalisation and globalisation of mining activities create a need for greater regional co-operation to combine efforts and financing, as envisaged by the SADC programmes.

Mineral exploration and development need access to a range of infrastructure in terms of transport, energy, water, and research and development facilities as well as other community services. A coordinated regional approach to the provision of infrastructure, involving co-operation between SADC member States and industry can produce enormous advantages in the size and long-term competitiveness of investment. The coordination can result in the creation of employment, improvement in the quality of life of the Namibian people, encourage value addition activities and permit industry to realise their profits earlier than would otherwise be the case.

Namibia has well developed infrastructure that can bring unprecedented advantages to the region if it is used in a co-ordinated way. Examples of Namibian assets are the Walvis Bay harbour, the Trans- Kalahari and Trans- Caprivi highways, the under-utilised rail links and Tsumeb smelter and many others.

> *Government will encourage a co-ordinated SADC approach to the utilisation of joint infrastructure that benefits regional mineral activities.*

9.5 Environment

There is a view that regional initiatives are doomed to failure because national priorities and sentiments will always dominate, preventing regional development programmes from materialising. This view expresses that some countries will be more committed to regional initiatives than others and that this will affect the implementation and appropriateness of the programmes. Furthermore, political instability and national disasters will affect regional initiatives and programmes.

Government will encourage all SADC member States to ratify environmental conventions appropriate to the mining industry in SADC.

This will be achieved by the Government encouraging SADC to promote a dispute-solving mechanism that allows the countries most affected by a particular issue to lead the relevant development, while allowing those countries not affected by the issue to disengage them from the process.

10. THE WAY FORWARD

The mining sector is a vital component of the Namibian economy. The proper management of this sector is a matter of national priority and importance. The MME will provide full administrative support and amend mining, and other relevant, laws to give full effect to the provisions of the Minerals Policy.

The success of this policy will depend on a national consensus and political will to adhere to its underlying principles and fulfilment of objectives.

In an endeavour to fulfil its objectives, the MME will:

(a) Create innovative approaches to improve capacity for managing new partnerships with industry and communities;

(b) Facilitate good governance within the Ministry of Mines and Energy by a properly skilled personnel base;

(c) Promote consultation and co-operation between industry, government, local communities and other stakeholders;

(d) Develop a legal framework to support the vision and statements of intent of the Minerals Policy; and

(e) Create an appropriate suite of indicators of performance for the mining sector and facilitate the implementation of targets as outlined in this policy.

It is the intention of the Namibian Government to ensure that the mining industry keeps abreast of international developments.

Government supports the development of enterprises within a free market.

It is on this basis that the mineral wealth of Namibia will contribute to the growth and development of the Namibian society and the country as a whole.