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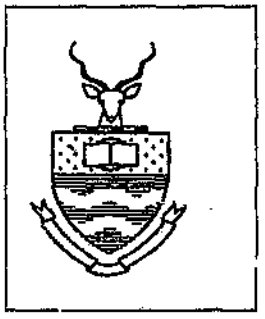
A MINERAL RIGHTS POLICY FRAMEWORK FOR PROMOTING THE SMALL-SCALE MINING INDUSTRY IN SOUTH AFRICA



Tichafa Chitsike

A project report submitted to the Faculty of Engineering, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Science in Engineering.

Johannesburg, 1998

DECLARATION

I declare that this project is my own, unaided work. It is being submitted for the Degree of Master of Science in Engineering in University of the Witwatersrand. It has not been submitted before for any degree or examination in any other university.

Tichafa Chutsike 23rd day of December 1998

ABSTRACT

This study addresses a principal issue associated with the small-scale mining industry in South Africa, namely mineral rights. Firstly it defines a small-scale mine and its role in the South African economy. It then examines the current mineral rights policy and the conditions under which the current mineral rights policy could be reformed in order to encourage the growth of the small-scale mining sector. Various models and proposals have been examined in an attempt to suggest the most suitable policy in terms of acquisition and distribution of mineral rights.

Acquisition of mineral rights remains one of the major obstacles facing small-scale mining companies. The need to change the legal framework surrounding the acquisition of mineral rights is clearly demonstrated in this project report. Simplification of the legal framework would lead t easy access to mineral rights by both large-scale and small-scale, South African and foreign mining companies and remove the traditional complexities associated with the current South African mineral rights policy which tend to sterilise mineral rights. These complexities include subdivision of mineral rights, potential lock-up of mineral rights by private companies and individuals and the State. Analysis of methods to rationalise the mineral rights policy have demonstrated that nationalisation and exprcpriation of mineral rights are counter productive and can not be used as vehicles for access to mineral rights.

In order to strengthen the small-scale mining industry changes to the mineral rights have been proposed. A model mineral rights policy framework has been designed to promote small-scale mining. Introduction of a mineral rights tax, taking into consideration the specifics of the South African mining industry, similar to that of Swaziland of 1958 is proposed as one of the ways of discouraging the sterilisation of mineral rights. It introduces a cost element in the locking up of mineral rights by private companies and individuals. It is envisaged that when the cost of holding these mineral rights is greater than the benefits of holding the mineral rights, mineral rights holders would relinquish them thereby allowing access to these mineral rights to other interested parties. The relinquished mineral rights should revert to the State, which in turn should allocate them to qualified mining companies. Due considerations of the unique characteristics of the South African mining industry need to be taken into account when designing any mineral rights policy. Implementation of any such policy should therefore be done with the consensus of the mining industry.

Access to State mineral rights is also considered vital. Whilst it is important to provide the small-scale mining sector with access to mineral rights it is recognised that the success of the sector depends many factors, mineral rights among others. A holistic approach that take into all facets of small-scale mining are included in the proposed policy framework for the development of the small-scale mining industry in South Africa.

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LIST OF ABBREVIATIONS

ANC	African National Council
DME	Department of Minerals and Energy
GDP	Gross National Product
ILO	International Labour Organisation
JA	Judge Assistance
LSM	Large-scale Mining
MSM	Medium-scale Mining
NSC	National Steering Committee
NUM	National Union of Mineworkers
SMI	International Agency for Small-scale Mining
tpa	tonnes per annum

CHAPTER 1

DEFINING SMALL-SCALE MINING

1.1 Introduction

South Africa, according to Stear (1994), has been the best place to mine in Africa, with mineral deposits that have resulted in a higher historical return on investment for the exploration dollar than anywhere else in the world. Due to the nature of the South African geology large-scale operations emerged. Exploitation of the Witwatersrand system required concentrated capital and technology that gave rise to the mining house. Although a combination of high expectations for South African mineral projects and the development of the "big mine" philosophy has resulted in exploration being focused on big mineral deposits, data available show that small-scale mining (SSM) exists in South Africa, though marginalised to an extent.

It is estimated that of the 1454 regulated mines in South Africa, 1200 are small mines (Weissenberg, 1996). In terms of employment and production, South Africa is essentially a country characterised by large mining operations providing 87 per cent of the jobs in the mining industry (Minerals Bureau, 1995). There has been, however, a surge of interest in SSM and this interest is reflected by the ongoing debate on a new minerals policy and in particular the need to promote the SSM sector (Stear, 1994). This study therefore aims to analyse the mineral rights situation in South Africa and the problems facing SSM companies in accessing the mineral rights. Based on these results, a mineral rights policy framework that should address the mineral rights problems has been formulated.

1.2 Statement of Problems

Historically mining in mineral producing countries started from small deposits, with small-scale companies forming the nucleus of their mining industries. It is from these humble and often struggling beginnings that larger deposits are developed into significant mines and successful mining companies evolve. In South Africa, however, it is said that there is little scope for SSM or small exploration companies (Jourdan, 1995). This is attributed to the fact that mineral rights in most of the rich mineralised areas belong to the big mining companies and private individuals; making it difficult for SSM companies to access these mineral rights. Under such circumstances, efforts by the Government and mining industry (refer to Discussion Document on Mining and Mineral Policy for South Africa, 1995) have been directed towards the formulation of a policy that provides SSM companies access to mineral rights.

Besides the problems of accessing mineral rights, the other problems faced by the SSM industry include issues of high environmental and rehabilitation costs, marketing and financial constraints. Although these constraints are acknowledged in the research report, the analysis of these constraints is beyond the scope of this research report.

1.3 Definitions

The definition of SSM is a subject of issue. There is no individual who is a custodian of this definition. Most definitions of SSM are based on the scale of production of the mine or on total number of employees. In spite of the frequent use of scale concepts, a globally accepted definition of SSM does not exist (Noetstaller, 1987). Generally,

definitions are based on one or more of the criteria listed in Table 1.1 and exhibit distinct differences as a result of scale of operation:

TABLE 1.1: CRITERION FOR MINE CLASSIFICATION

Criterion	Generally Observed Quality for	
	Small-scale Mining	Large-scale Mining
Mine output in tpa	Small	Large
Number of persons employed per unit of output	Large	Small
Gross annual income of firm	Low	High
Degree of mechanisation or capitalisation	Low	High
Labour productivity	Low	High
Size of mining concession	Small	Large
Size of reserves	Small/unknown	large/well known
Continuity or intermittence of operation	Frequently intermittent	continuous

Source: World Bank Technical Paper, Industries and Finance Series (1987)

SSM differs from artisanal mining by virtue of its legislative and regulatory framework. All the legislative and regulatory requirements that apply to LSM also apply to SSM. Table 1.2 provides a list of the distinctive differences between, artisanal, small and large-scale mining operations.

TABLE 1.2: DISTINCTION BETWEEN ARTISANAL, SMALL AND LARGE MINES

Parameters	Artisanal	Small	Large
Legal persona	No	Yes	Yes
Regulated	No	Yes	Yes
EMPR	No	Yes	Yes
Workers	<20	>20	>20
Automation	No	Yes	Yes
Industrial minerals	No	Yes	Yes
Sand/ Dimension Stone	No	Yes	Yes

Source: Minerals and Mining Policy Public Workshop (1996)

Jennings (1993:3) defined SSM as "labour intensive mining operations with low per capita productivity, using basic technology resulting from small investment of capital". Thus, in his view an artisanal mine employing hundreds of people would be considered small-scale.

The distinction made by Kambani and Noetstaller (1987) between artisanal and SSM is based on the fact that artisanal operations are usually illegal while SSM enterprises are formally registered entities, usually in the form of single proprietorship companies, co-operatives or limited companies. SSM enterprises generally have basic management structures, a hired labour-force and a minimum degree of mechanisation.

A small number of employees may not be a relevant indication of the size (in terms of production) of the mine since it could be related to a high degree of mechanisation on the mine. This in turn may result in different labour productivity. Even if measured as per unit output, the number of persons employed is highly variable depending on the type of operation and geological characteristics of the deposits. Gross annual income largely depends on the unit value of the commodity produced. The minimum size of the mining lease required to support a given scale of operation is influenced by type of the mineralisation and the shape of the orebody, while the viability of the project depends on the size of reserves as well as grade of the ore. Continuity or intermittence of mining operation may be caused by factors other than seasonal employment in the other sectors of the economy, e.g. climatic aspects or market forces.

Noestaller (1987) advocates final output in tonnes as the only acceptable measure for delineation of the scale of an operation in the mining industry. He concludes that the criteria listed in Table 1.1, are suitable only as additional indicators and for orientation purposes in defining the size of a mine. Other various definitions have been used to distinguish SSM from the other categories. One example is the definition based on the annual production in tonnes per year run of mine (tpy r.o.m.) ore as suggested by Noetstaller (1987) and shown in Table1.3 below.

TABLE 1.3: CLASSIFICATION OF MINE STATUS USING ANNUAL PRODUCTION (TONNES PER ANNUM RUN OF MINE ORE)

Small Scale Mining (t/a)	Large Scale Mining (t/a)	Source
below 50000	-	United Nations, 1972
below 50000	50000 to 500000	Lotschwar, 1986
below 100000	-	Carmine, 1985
below 100000	100000 to 1000000	Leading, 1983
below 100000	-	De Bored, 1983 and Mikutowitcz, 1981
below 100000	-	U.S.B.M., 1983
from 20000 to 200000	-	Ingler, 1983
below 150000	-	Mining Magazine, 1986 and previous years
below 50000	50000 to 1000000	Farnandez, 1983
below 60000	-	del Castillo, 1980

Source: World Bank (1987)

The Minerals Bureau has given its own definition of the SSM (Table 1.4), based on the number of people employed in the operation. A total number of 50-99 employees would signify a small-scale operation. This number is the same for all nine commodities studied. The problem with this definition is that it disregards the actual size and output of the mine and ignores the relationship between number of employees and size of mine in the case of mechanisation.

TABLE 1.4 : SSM ACTIVITIES, 1993: ACCORDING TO EMPLOYMENT

Mineral	Category of Small Mine	Employment	Total Employment	Total Mines
Gold	Artisanal	1-5	7	2
	Micro-scale	6-20	0	0
	Very small-scale	21-49	23	1
	Small-scale	50-99	344	4
Diamonds	Artisanal	1-5	15	6
	Micro-scale	6-20	88	7
	Very small-scale	21-49	324	10
	Small-scale	50-99	443	7
Semi-precious	Artisanal	1-5	31	11
	Micro-scale	6-20	40	3
	Very small-scale	21-49	25	1
	Small-scale	50-99	0	0
Brickclay	Artisanal	1-5	18	9
	Micro-scale	6-20	109	10
	Very small-scale	21-49	34	1
	Small-scale	50-99	132	2
Aggregate	Artisanal	1-5	46	13
	Micro-scale	6-20	344	28
	Very small-scale	21-49-	1622	52
	Small-scale	50-99	944	15
Sandworks	Artisanal	1-5	180	64
	Micro-scale	6-20	427	40
	Very small-scale	21-49	565	17
	Small-scale	50-99	358	6
Coal	Artisanal	1-5	0	0
	Micro-scale	6-20	11	1
	Very small-scale	21-49	177	5
	Small-scale	50-99	309	4
Slate	Artisanal	1-5	0	0
	Micro-scale	6-20	0	0
	Very small-scale	21-49	25	1
	Small-scale	50-99	123	2
Salt	Artisanal	1-5	55	19
	Micro-scale	6-20	340	37
	Very small-scale	21-49	291	12
	Small-scale	50-99	249	5

Minerals Bureau, 1995 (Unpublished)

There seem to be considerable variations in defining the size of a SSM. There is, however, general agreement that a SSM could be approximated to have an output of between 50,000 tonnes and 100,000 tonnes per year run of mine ore usually exploiting high value, low volume minerals such as gold and gemstones. The number of people employed in a SSM company are estimated to be at least 20. Based on the information given in Tables 1.2 and 1.3 it is considered that a small-scale mine is registered as a company and regulated by the laws that governs the operations of a mining company. This means the small mine is required to draw up an Environmental Management Programme Report and its operations are run under a qualified mine manager.

Most researchers who have attempted to define SSM have suggested a definition of a SSM as a mine with production between 50 000 tonnes per annum and 100 000 tonnes per annum. The preferred definition of a SSM gives a guideline for distinguishing between the various forms of mining as it impossible to give an exact definition of SSM in terms of production capacity and employment levels. The report therefore assume any mine with production lower than 100 000 tonnes per annum, regulated by the Companies Act and laws that govern mining companies and have at least 20 people employed, to be SSM.

CHAPTER 2

THE ROLE OF THE SSM INDUSTRY

2.1 Introduction

Several researchers have highlighted the role of the SSM industry and its relationship to the national economy. Noetstaller's (1987) analysis of mines with an annual production of less than 100,000 tons indicates that small mines contribute 16% to the global output of non-fuel minerals. In terms of gross value, this is equivalent to US$21.6 billion in 1982 dollars. In 1979, China produced 635 Mt of coal of which 43.7% came from some 20,000 small mines. In 1983, the SSM sector produced 49.2% of total coal produced in China. In the United States of America, small mines produce about 20% of the total coal output of 700 Mt (Noetstaller, 1987).

The main objective of SSM is a profit. Secondary objectives are to create employment, foster economic al development and achieve an optimal utilisation of mineral resources. It is considered that where the assessed potential of SSM, such as wealth creation, employment, economic and rural development, outweigh its negative characteristics (e.g. environmental damage, poor health and working standards) the government should assist in setting up the small scale operations. According to Jennings (1993), of the 30 million or so mineworkers throughout the world, it is reasonable to assume that at least 6 million are engaged in SSM in developing countries. The levels of employment in SSM in various countries are listed in Table 2.1. It is estimated that China has about 3 million people employed in small-scale coal mines. Estimates of employment

in the sector vary and are difficult to quantify because the numbers normally include the artisanal miners (World Bank, 1992).

TABLE 2.1: SSM EMPLOYMENT IN VARIOUS COUNTRIES

Country	Employment	Reference
China	3,000,000	Jennings, 1993
Brazil	1,000,000	SMI, 1990
India	500,000	SMI, 1989
Indonesia	465,000	ILO, 1990
Philippines	200,000	ILO, 1990
Zaire	150,000	ILO, 1990
Tanzania	100,000	Kambani and Noetstaller,1994
Mali	100,000	World Bank, 1992
Sierra Leone	100,000	World Bank, 1992
South Africa	79,338	Minerals Bureau 1995
Burkina Faso	60,000	World Bank, 1992
Ghana	30,000	World Bank, 1992
Guinea	30,000	World Bank, 1992
Zimbabwe	30,000	World Bank, 1992
Peru	20,000	ILO, 1990
World Total	>6,000,000	Jennings, 1993

Adapted from Kambani and Noetstaller, 1994

2.2 The Role of the SSM Industry: A Case of Ghana

In Ghana all mineral rights belong to the State and the thriving SSM points to the success that have been made by the SSM sector in contributing to the economy of the country. This case study illustrates two important factors. Firstly, that the SSM sector could play a

significant role if it is given access to mineral rights. Secondly, that even in a situation where mineral rights are State owned, with the proper policy framework, the SSM sector's contribution to the economy of a country may be enormous.

SSM operations normally extract high-value and low-volume minerals like gold and gemstones. These precious minerals are luxury goods, for which there is a limited market in developing countries for the final gold jewellery or polished stones. SSM is therefore an export-oriented economic activity, contributing significantly to the foreign exchange earnings of developing countries (Kambani and Noetstaller, 1987).

The contribution made by the small-scale sector in Ghana provides an insight into the value of the SSM sector to a developing economy. From 1989 to 1995 SSM sector gold production grew 14 fold; from 2 per cent in 1988, to 8 per cent of total gold production in 1995. During the same period, 1988-1995, large scale gold mining production grew only 4 times as shown in Table 2.2 and Figure 1. SSM and medium-scale mining (MSM) diamond production has been on the declined since 1991. Overall, small and medium sized mines produced more diamonds than the LSMs during the same period.

The gold and diamond and gold production figures in Tables 2.2 and 2.3 could have been substantially higher had all the output smuggled out of the country taken into account. The production data for both gold and diamonds in Ghana are therefore a misrepresentation of facts because they are aggregated and do not distinguish between SSM and artisanal mining. However, in the absence of data distinguishing the SSM from artisanal mining, the data could be taken to be fair approximation of the activities of SSM.

TABLE 2.2: GHANA GOLD PRODUCTION

Year	Small-Scale Gold Mines			Total Gold Production	
	Fine Ounces Au	Kg Au	kg Au% contribution	Fine Ounces Au	kg Au production
1989	9 272.00	288.39	2.16	429 475.81	13 358.19
1990	19 234.00	598.24	3.55	541 408.33	16 839.68
1991	8 493.00	264.16	1.00	845 907.85	26 310.68
1992	10 866.16	337.97	1.09	998 194.50	31 047.32
1993	33 646.59	1046.53	2.67	1261 24.26	39 234.68
1994	89 520.44	2784.40	6.26	1430844.76	44 504.25
1995	128 533.96	3997.85	7.53	1706228.68	53 069.65

Source: Mining Commission-Ghana (1996)

FIGURE 1: GOLD PRODUCTION IN GHANA

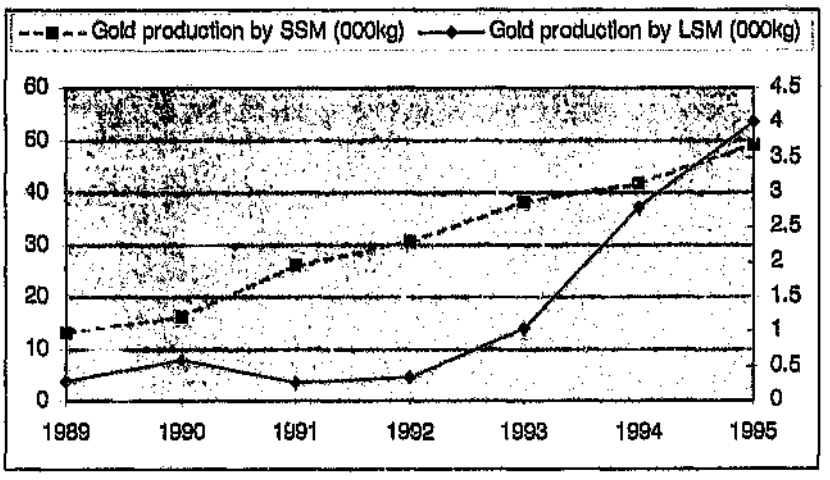
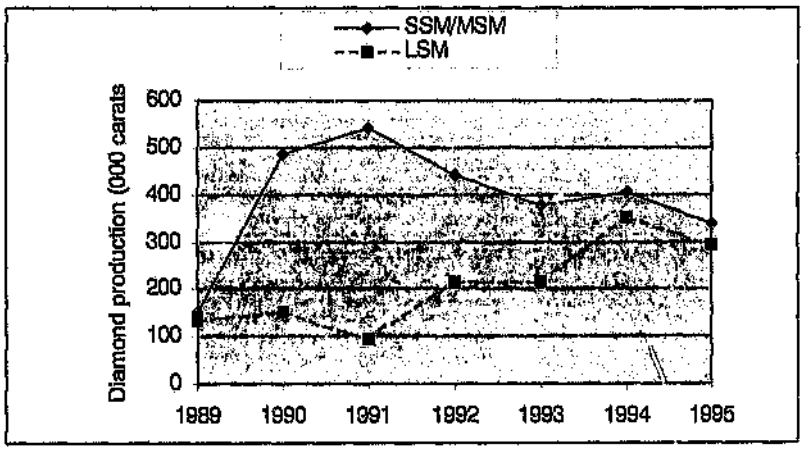


TABLE 2.3: DIAMONDS PRODUCTION IN CARATS

Year	Small and Medium Diamond Mines		Total Diamond Production
	Carats	% Contribution	Carats
1989	151 606.00	53.08	285 636.00
1990	484 876.00	76.18	636 503.00
1991	541 849.00	84.96	637 736.00
1992	442 266.00	67.37	656 421.31
1993	376 399.55	63.70	590 841.65
1994	405 829.70	53.54	757 991.41
1995	337 456.94	53.45	631 338.46

Source: Mining Commission-Ghana (1996)

FIGURE 2: DIAMOND PRODUCTION IN GHANA



2.3 The Role of the SSM Industry in South Africa

A comparison of the economic contribution of the SSM and LSM to the mineral industry in South Africa has been documented by the Minerals Bureau of South Africa and the data

relating to employment, sales and production is shown in Table 2.4. The Minerals Bureau of South Africa reported that in 1994 the SSM employed 13 percent of the approximately 600 000 workers in the mining industry. This indicated that some 80 000 workers were in SSM employment. In 1994 the mining industry employed some 610 294 workers. Of R45 billion of mineral sales in 1991, the SSM sector contributed R6 billion. In that same year, almost all aggregate and limestone produced in South Africa came from the SSM sector.

With an official unemployment rate of 37 per cent, it is argued that South Africa needs to promote small and medium-size enterprises through state intervention in order to create jobs and reduce poverty and unemployment amongst its people. Poverty and inequality flow from unemployment and aggregate unemployment is increasing, although the growth of real Gross Domestic Product (GDP) has improved impressively since 1992. Real GDP increased from -3 per cent in 1992 to 3 per cent in 1996 (Quarterly Bulletin, 1997). In order to reduce the aggregate unemployment, given the growth in population the Financial Mail (1996) estimates that the real GDP growth has to exceed 8 per cent a year.

TABLE 2.4: CONTRIBUTIONS TO MINERALS PRODUCTION, MINERAL SALES AND EMPLOYMENT BY THE SMALL- AND LARGE-SCALE MINING SECTORS

	Small-scale contribution	Large-scale mining contribution
PRODUCTION %		
Aggregate	100%	-
Limestone	100%	-
Diamonds	14%	86%
Gold	2%	98%
Sales Value (R bil)	R6	R39
Employment	79 338	530 956

Sources: Minerals Bureau, 1992, 1995

The goal of the Government as set out in the white paper on small business promotion is to redistribute wealth and empower black people economically, particularly the previously disadvantaged groups such as women. According to Jourdan (1996), the expansion of the minerals sector, which accounts for about three-fourths of South Africa's exports, is essential to the government's reconstruction and development programme (RDP). The creation of wealth could furthermore assist in reducing levels of violence that could potentially destabilise the economy of South Africa.

Due to their lower overheads and fixed costs, SSM companies are able to mine deposits of smaller size and higher grades profitably, where LSM is not possible. It is therefore possible to conclude that SSM companies would be better suited to succeed in exploiting

profitably those deposits that would be marginal to LSM companies. SSM companies are also better suited to the expeditious development of new deposits than large mining companies, because the high levels of entrepreneurship and innovation found in small companies often lead to innovative and inventive reasoning.

The creation of a vibrant SSM sector in South Africa would convert some of the ore-deposits that exist only as potential resources at the level of large-scale operations into exploitable reserves at the scale of a small operation. In addition, the creation of the small mining operations would enhance the spirit of entrepreneurship in the country as well as provide opportunities for the surplus-trained manpower that often arises from retrenchments during the depressed portions of economic cycles. The creation of a vibrant SSM sector could also help in eliminating the problem of artisanal mining. The World Bank recognised the problems of artisanal mining in Africa as a fact of life and made various recommendations to manage this situation. It recommended that:

> "In some countries, artisanal mines are permitted under the mining law but generally such miners have few rights and can be displaced by commercial mines. In many countries, they are simply illegal. In most cases, the illegality is a rational response to poorly formulated legislation, inadequate enforcement, and economic distortions.
>
> The challenge is to successfully modify these factors and provide incentives so that artisanal mining will be encouraged, become regularised, grow and produce more revenue for both miners and government. The two essential issues are the legal rights to mine and satisfactory marketing arrangements.

> Regulations for environment and safety in this sector should be realistic. The government should attempt to create an administrative presence in the mining areas to control the worst aspects of artisanal activity, especially those regarding safety, health and the environment, and provide some basic services and technical assistance" (Engineering and Mining Journal, October 1992: 40).

Artisanal mining is not only limited to the other countries of Africa and Latin America but is also rampant in South Africa. Examples of artisanal mining in South Africa are the Osizweni and Magdaleni coal mining operations in KwaZulu-Natal shown in Figures 3 and 4. The DME estimates the total number of people employed as artisanal miners to be 7500. Diamond and gold seem to be minerals most favoured, followed by coal and clay, clay and sand.

At the subsistence level poverty is the driving force behind efforts to enter mining. Circumstances and a basic need to provide for themselves and their families drive miners at this level. Clearly this situation differs, for example, from that of an established SSM company or LSM company which invests in a mine as part of its business strategy, i.e. the reason for considering an investment is motivated by reasons other than poverty.

It should be understood therefore that the intention is not to promote subsistence and artisanal mining. Rather, it is that the government must consider ways and means to encourage SSM and enhance opportunities through technical and financial support and access to mineral rights, whilst also maintaining safety, health and environmental standards.

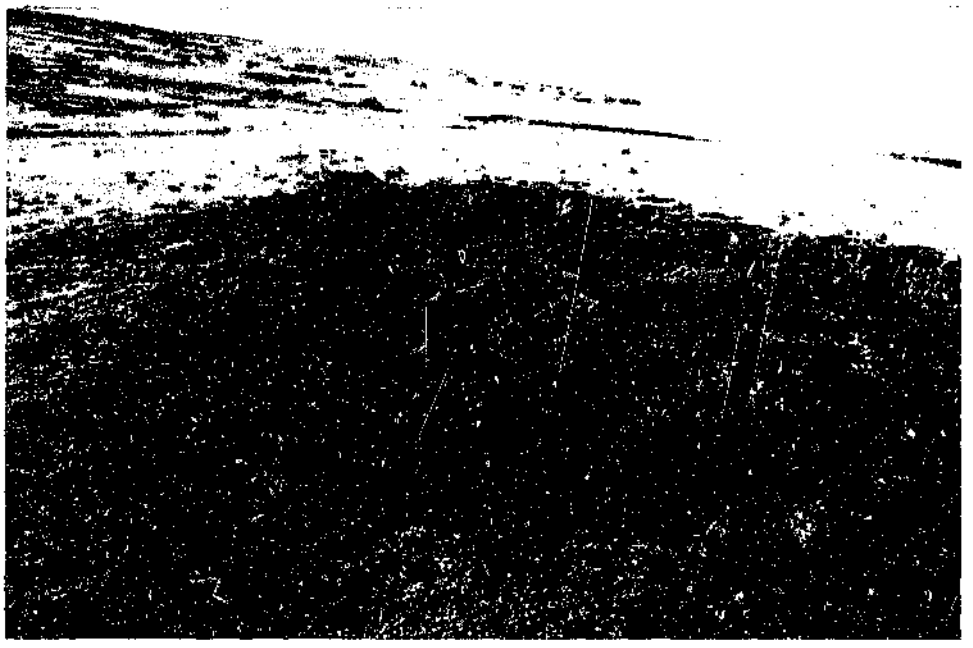
FIGURE 3: ARTISANAL COAL MINING AT OSIZWENI, KWAZULU NATAL



FIGURE 4: ARTISANAL COAL MINING AT MAGDALENI, KWAZULU NATAL



FIGURE 4: ARTISANAL COAL MINING AT ANANDALE, KWAZULU NATAL



2.3.1 Case Study: Maranda Mining Company

Small and medium-scale mining are capable of making substantial contribution to national and provincial economies. An example of this is the Maranda Mine, which produces copper and is situated 53 km from Tzaneen the nearest big population centre. The mine employs mainly local people except for the technical positions that are sourced elsewhere. Out of the 520 people employed by the company, 500 are locals.

It is estimated that each mineworker in South Africa supports between 7 and 11 dependants (Minerals and Energy Policy Centre, 1996). Assuming an average of 11 dependants per mineworker, it may be argued that 6240 (worker plus 11 dependants) livelihoods are dependent on the incomes from Maranda Mine. The mine provides

employment in this remote, rural area, and is the only means of livelihood for the community in the immediate vicinity.

Assuming an indirect national rate of job dependency with a multiplier effect of 2.3, as given by Solomon (1996), the total livelihoods indirectly dependent on Maranda Mine is 1196. Altogether, this means a conservative 7436 livelihoods are dependent on the salaries and wages from Maranda Mine.

2.3.2 Mining and Labour

Downscaling of the mining industry is a source of great concern to the government and industry. The Minerals and Energy Policy Centre (MEPC), in its presentation to the Mineral and Mining Policy Workshop (1996), points out that downscaling primarily affects the gold and diamond sectors. Table 2.4 and Figure 3 illustrate the downscaling the gold mining industry has been going through. From 1993 to 2000 the gold industry is expected to retrench about 129 000 workers.

If the retrenched workers were to be absorbed in other sectors of the economy, retooling the retrenched workers with new skills would be required. Poor levels of education of these retrenchees are likely to inhibit retraining at an acceptable rate. A SSM industry would provide employment for many people, whether as owner-operator of an artisanal mine, or owner of or labourer in an entrepreneurial one and lessen the financial burden of retraining and retrenchments in the mining industry.

Low commodity prices and poor labour productivity are the major causes of downscaling

in the mining industry. Philip (1996) points out that the scale of job losses is undermining the strategy for growth and development by government, making this a crisis of national proportion.

The SSM industry, though vital for the economy, should not be seen as a panacea for the retrenchments in the mining industry. It should therefore be viewed as a source of (limited) employment opportunity for some of the retrenched workers. The long-term solution to downscaling should lie in alternative growth strategies to replace mining's declining contribution to the economy.

TABLE 2:5: EMPLOYMENT LEVELS ON SOUTH AFRICAN GOLD MINES (000)

COUNTRY OF ORIGIN	1986	1987	1988	1989	1990	1991	1992
South Africa	226	273	265	246	224	194	171
Lesotho	104	106	101	101	98	88	84
Mozambique	56	46	44	43	43	42	42
Botswana	19	18	17	16	15	13	11
Swaziland	14	16	16	17	16	16	15
Malawi	18	18	13	2	0	0	0
Total Foreign	211	204	191	179	172	159	152
Total Workers	477	477	456	425	396	353	323

Source: Minerals Bureau of South Africa, 1993

FIGURE 6: EMPOYMENT LEVELS ON SOUTH AFRICAN GOLD MINES (000)

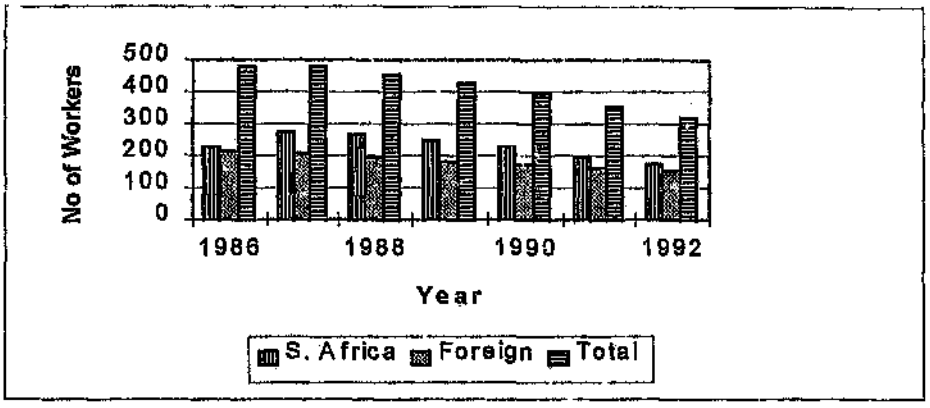


TABLE: 2.6 PROJECTED RETRENCHMENTS (000): 1993-2000

COUNTRY OF ORIGIN	1993	1994	1995	1996	1997	1998	1999	2000
South Africa	156	142	130	119	109	99	91	83
Lesotho	78	73	68	63	59	54	51	47
Mozambique	39	36	34	31	29	27	25	24
Botswana	10	10	9	8	8	7	7	6
Swaziland	14	13	12	11	10	10	9	8
Malawi	0	0	0	0	0	0	0	0
Total Foreign	141	132	122	114	106	99	92	85
Total Workers Retrenched		22	22	21	18	16	16	14
Progressive Retrenchments		22	43	62	80	96	112	126

Source: Minerals Bureau, 1993

2.4 Conclusion

SSM plays a vital role in the economies of mineral rich developing countries. Several researchers have highlighted the role of the SSM sector and its relationship to the national economies. The objectives of SSM are similar those of MSM and LSM in that all aim to earn a profit from their operations. This fact differentiates the SSM, MSM and LSM sectors from artisanal mining, which is subsistence in nature.

Compared to LSM the SMM industry plays a lesser role in the economy of South Africa. In China 40 per cent of the coal produced is produced by the SSM sector. Assuming the SSM sector in South Africa produces 13 per cent of the total 57 000 million tonnes coal produced in 1997. Suppose the SSM sector production is increased by 50 per cent, the sector contribution to total coal produced will only increase to 19.5 per cent. In order for the South African SSM coal mining to reach the magnitude of the contributions similar to those in China the sector has to grow two fold. The analogue above shows that the LSM sector is likely to remain the main source of coal in South Africa. However, the SSM sector as shown in the case of Maranda Mine, has an important role in the economy of a developing country such as South Africa.

Although the SSM sector can help in absorbing some of the retrenched mine workers, there is need to take cognisance of the fact that the long term solution to the retrenchment of workers should be in retooling them with new skills that would enable them to work in other sectors of the economy. As discussed above, it is impossible for the SSM mining industry to absorb all those retrenched from within the mining industry. Hence, in promoting SSM it is equally important to look at ways of promoting MSM and LSM.

CHAPTER 3

SOUTH AFRICAN MINERAL RIGHTS

3.1 Introduction

Ownership of mineral rights in South Africa is dual (mixed), with the State exercising total control, as indicated by map 4, over approximately more than 70 per cent of the land area (van Rooyen, 1993). The State also controls the mineral rights underlying the continental shelf. Where the State exercises partial control in the case of the former self-governing territories, mineral rights and land rights have been separated. In this case, the State holds the mineral right in trust for a community or a tribe, e.g. Lebowa Mineral Trust. The mineral rights can therefore be categorised in four classes:

(i) Mineral rights with respect of tribal land and owned by the state or tribes;

(ii) mineral rights owned by the State;

(iii) Mineral rights owned by the surface owners, i.e. no separation has taken place, e.g. farmers, and

(iv) Mineral rights owned by holder/s other than the surface owner. This includes mining companies and deceased estates.

The distribution of mineral rights and mineral right holdings by companies is shown in Tables 4.1 and 4.2 respectively. These holdings represent about 27.7 per cent of South Africa's surface area (Van Rooyen, 1993). Table 4.2 shows the majority of company mineral rights holdings being held by the Transvaal Consolidated Lands and Exploration Company and Anglo American Corporation. The distribution of mineral rights shown in

the Tables 4.1 and 4.2 could only be used as a guide to the ownership distribution of mineral rights. This is because the Department of Minerals and Energy by its own admission does not know the full extent of its holdings of state owned mineral rights.

According to the South African common law, the owner of land is also the owner of the space above the land as well as the owner of the minerals in the land. This fundamental principle is expressed in the maxim, *cuius est solum eius est usque ad coelum et ad inferos* [1](Badenhorst *et al*, 1994). In Union Government v Marais and Others 1920 AD 240 at 240, Innes CJ stated the common law principle as follows:

> "The principle is fundamental that the owner of the land is owner not only of the surface but of everything legally adherent thereto, and also of everything contained in the soil below the surface"

[1] *Cuius est solum eius est usque ad caelum et usque ad inferos* - the owner of the land is also the owner of the space above and below the surface of the land (Accursius - 13 century Italian Commentator)

TABLE 3.1: DISTRIBUTION OF STATE OWNED MINERAL RIGHTS

Areas to which State owned mineral rights are apportioned	Area as a % of total area of RSA
Former Self-Governing States (all minerals)	15.4
Cape Province Excluding Former Self-Governing States	46.2
(Gold, Silver, Precious Stones)	
KwaZulu Natal Excluding Former Self-Governing States	4.7
(Precious Metals, Precious Stones)	
Kruger National Park	1.6
Alienated State Land (mostly all minerals)	4.4
	72.3
Private Sector (companies and individuals)	27.7
TOTAL	100

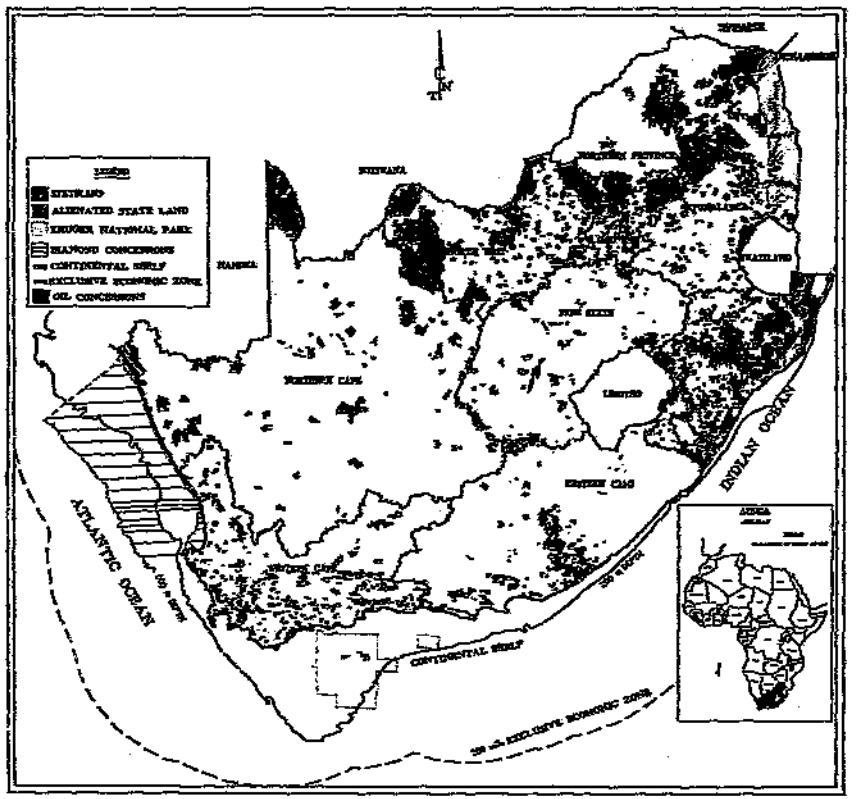
Source: Van Rooyen, 1993

TABLE 3.2: MINERAL RIGHTS HOLDINGS BY COMPANIES IN RAND VALUE AND BY AREA

Group Mineral Rights Holdings	R (M)	Estimated Hectares	% of total
Transvaal Consildated Lands and Exploration Company	748.4	1 871 000	56.78
Anglo American Corporation	212	540 000	16.39
Amgold			
De Beers Centenary	32	82 000	2.49
Gencor	26	67 000	2.03
Gold Fields (1)	57	146 000	4.43
JCI	126	323 000	9.80
Anglovaal	44	112 000	3.40
	60	154 000	4.67
Note 1. Actual	1 305.4	3 295 000	100

Source: Van Rooyen, 1993

FIGURE 6: PLAN SHOWING SEA AND OIL CONCESSIONS, STATELANDS, AND STATE MINERALS



Source: Minerals Bureau, 1996

3.2 Principal Rights of Mineral Right Holder

The holder of the mineral rights is entitled to go upon the property and search for minerals and if he finds any, to sever them and carry them away, subject always to the relevant statutory provisions. The mineral right can be equated to the property right. In essence, the property right is the right of ownership in a thing and the thing to which this right relates (Silberburg and Schoemann, 1987). Mineral rights are therefore rights in property in which the state's constitutional role is to protect rights in property. The limitations or conditioning factors would be rights to expropriate for public interest etc., but the state does not have a constitutional role to distribute property rights. It is argued by proponents of change to the current system that the state has a role to redress historical injustices through redistribution of unjustly acquired property.

3.3 Separation of Mineral Right Holding from Land Ownership

The first legislative evidence that rights to minerals could be held separately from ownership in land is to be found in a resolution of the Volkstraad of the South African Republic dated 8 November 1881 (Viljoen H. P and Bosman P. H., 1979). This resolution required mineral rights sales to be registered in the office of the Registrar of Deeds. Further evidence that rights to minerals could be held apart from the ownership in land is to be found in the sections 30 and 32 of the Registration of Deeds and Titles Act 25 of 1909 and the Deeds Registries Act 13 of 1918.

Upon severance from the ownership of land, a mineral right is created and such right is held under a separate title. These mineral rights are real rights in property. A real right is a right against third parties so that the owner of the right can sue anyone for it. These rights afford good security and continuity of tenure allows prospecting or mining or to grant others these rights, permit transfer and marketing in rights to prospect and mineral rights.

The South African mineral rights system evolved since 1813 into a very complex system (Kruger *et al*, 1991). Although according to Roman-Dutch Law ownership of land includes the surface and the subsurface (minerals), mineral rights over the years have been severed by means of a certificate of mineral rights, most of which have been acquired by individuals and companies. In many cases mineral rights have been subdivided through laws of inheritance and Jourdan (1993) notes that, as a consequence, the mineral rights on a given farm were held by more than 150 people. This kind of a situation discourages new entrants in the industry, particularly small-scale operators

3.3.1 Kruger et al (1991) in a case of the Vergenoeg Fluorite Mine Problems arising from subdivision of mineral rights

The case of Trojan Exploration Company v Rustenburg Platinum Mines Limited (S. A. (4), 1996) also demonstrates the complexities caused by the sub-division of mineral rights. Not only does this case highlights specific problems associated with the subdivision of mineral rights, but also highlights problems associated with the access to mineral rights. These include among others the non-availability of information and locking up of mineral rights by the owners.

3.3.2 Sub-division of Mineral Rights: The Case of the Vergenoeg Fluorite Mine

Kruger *et al* (1991) in the discussion entitled "Equitable distribution and efficient use of mineral rights: the case of South African Minerals Corporation" examined the complexity caused by the sub-division of mineral rights of the Vergenoeg Fluorite Mine. Fluorite is the principal economic mineral and is associated with haematite. The deposit is located on farms Kromdraai *209JR* and Naauwpoort *208JR* with the Vergenoeg Fluorite mine situated at Kromdraai *209JR*. Lourens Jacobus Erasmus and his wife Helletje Maria Erasmus under the Deed of Transfer T611/1876, in the Pretoria Deed Office originally held the mineral rights of the farm 209JR together with a freehold.

The farm Kromdraai now comprises of portions RE, RE2, 3, 4, 5 and 11; and portions RE1, 6, 7, 8, 9 and 10 are consolidated with Rust der Winter 180 JR. The subdivision of the latter portions into numerous agricultural holdings has therefore redefined the cadastral boundaries (dotted lines in Figure 7). Kruger *et al* (1991) concluded that this would complicate the choice of possible future exploration targets for fluorite and other minerals.

During the years since 1929, the mineral rights have undergone several sub-divisions. Consequently, a total of 288 individuals have shares in the mineral rights fractions that range between 3.5 to 0.00005 per cent of the original portions of Kromdraai. A further complication is that rights to iron have been severed from the rest of the mineral rights. Acquiring mineral rights or prospecting lease agreements on such a property, which is necessary before prospecting can begin, would involve tracing each of these mineral-right holders. The difficulty of accessing the mineral rights will therefore delay the final acquisition of these rights. This case highlights the difficulties that a SSM company (LSM

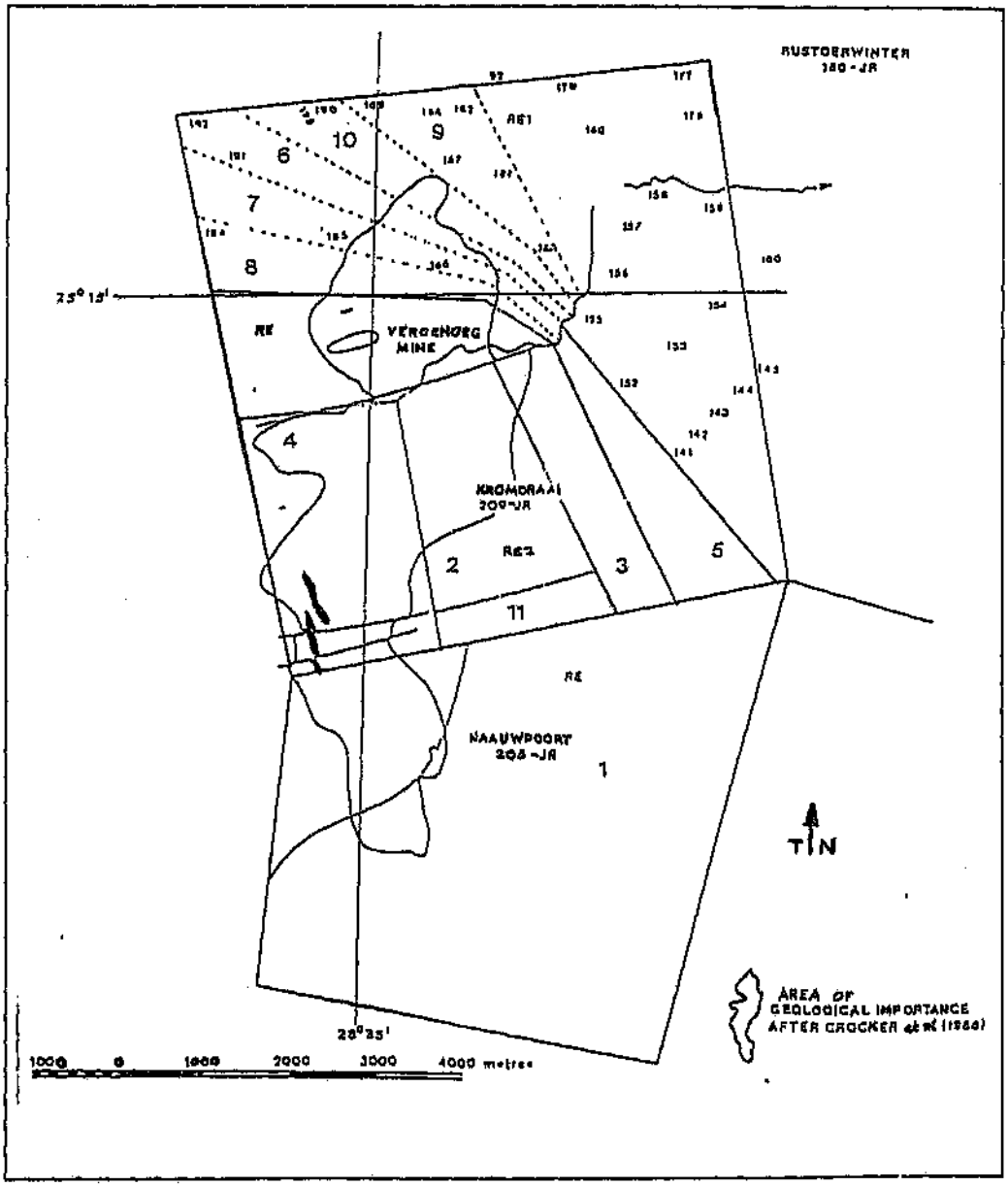
companies would be well equipped with the legal expertise and the financial means) would face in order to access these mineral rights.

3.3.3 Case Study: Transvaal Consolidated Lands and Exploration Company (TCL)

Kruger *et al* (1991) also gives an example of the complex nature of mineral rights in South Africa as exemplified by sterilisation of mineral rights held by the Transvaal Consolidated Lands and Exploration Company (TCL). TCL acquired large tracts of land for the exploration and pre-emption of mineral rights. This company holds land in the Rustenburg, Waterburg, Middleburg and Lydenburg districts covering a total of 1,871 million hectares.

Kruger et al (1991) concluded that the mineral rights held by TCL, except Rand Mines, are effectively sterilised. Although TCL does not have the staff to effectively prospect its vast holding, any negotiation with the company tor prospecting is usually protracted, frustrating and futile.

Fugure 6: Kromdraai 209 JR showing the complex subdivision.



Source: International Affairs Bulletin, 1991

3.3.4 In the case of Trojan Exploration Company v Rustenburg Platinum Mines Limited 1996 (4) SA 499 AD.

The Appellate Division (A.D.), for the first time in South Africa, stipulates that co-ownership of mineral rights is legal in the Republic of South Africa. The main issue in this case is whether the respondents (Rustenburg Platinum Mines Limited (Rusplats), who have acquired the rights to the precious metals in a certain area vested, were entitled to extract and sell their precious metals as well as their " by-products" - which were base metals - and of which such base metal rights existed in the appellant (Trojan Exploration). Briefly, Trojan Exploration was the holder of all the minerals in the Umokoanesstad area, except for precious metals only. Pyramid Platinum Ltd. (second appellant) was the registered holder of the mineral rights in respect of which Trojan had the prospecting contract. Congruously, Rustenburg Platinum Mines was the registered holder of the rights to precious metals. It's subsidiary, Lebowa Platinum Mines Ltd (Leplats), had the mining title in respect of precious metals by virtue of a registered mining lease as defined in S1 of the Mineral Right Act 20 of 1967.

It was common cause between the parties that the ores mined by Leplats contained a mixture of precious metals and base minerals in a variety of combinations such that it was impossible to mine one group without at the same time mining the other. This was the root of the problem. Trojan in 1989 demanded that Leplats refrain from mining anything other than precious metals. The ore raised by Lebowa from Umokoanesstad was then indiscriminately mixed with ore from mining anything other than precious metals. The precious metal as well as base metals was then sold.

The Trial Court: The Court *a quo* (court of first instance) allowed Rustenburg Mine to mine payable ore despite it containing base metals and minerals, that were held by another, and to retain these base metals and minerals as their own and sell them for their own account. The appellant thus lost all their rights to what was contemned in such ore **because** it contained precious metals worth mining for.

The Appellate Division[2]*:* The A.D. overruled the trial court in a majority Schutz, J. A., with Botha, J. A. and Nestadt , J. A. concurring. Plewman, A. J. / Heerden, J. A. concurred in the minority judgement. The majority adjudicated th... and Pyramid were the co-owners of the ore mined by Lebowa and Rustenburg Mines - but the normal consequences of co-ownership were **not** necessarily applicable. **Hence Lebowa and Rustenburg were not entitled to appropriate base metals or minerals derived from such ore and sell for their own account without due consideration of the appellant's rights in respect of such ore.**

The decision was based on the following reasoning:

Firstly, upon analysing the definitions of 'base metals' and 'precious metals' in the original 1908 Gold Act and 1934 Amendment,: the Trial Court erred upon their interpretation, as there was no suggestion that base ...etals was a precious metal nor that where combination ore was worked, that the holder of precious metals has a better right than the base metal ones;

Secondly, it was incumbent on Rustplats to prove an implied term to the effect that in the course of acquiring the precious metal rights it had succeeded also in confiscating base metals;

[2] *The Appellate Division* - the Supreme Court

Thirdly, the right to mine one mineral did not authorise the taking of another with which it was found in association (see Geduld Property Mines Ltd. v New Springs Collieries Ltd. 1934 TPD 104; Rogers v Brenton (1847) 10 QB 26). Hence, Rusplats were entitled in the course of their mining of precious metals in a reasonable manner, to extract all ore also containing base metals and minerals later separated for themselves;

Fourthly, when the mineral rights were reserved in 1925 and split in 1966, the latter date did not create the right, but merely the division of an existing rights; and

Fifthly, the main question of who was entitled to the right has several theoretical possibilities of (a) being some sort of co-ownership, (b) a *jus re aliena* (a right in the thing of being alienated), (c) a right *sui generis* (a right which is a class of its own), (d) a personal right (a right that exists only between individuals), (e) unjust enrichment (a claim based on the principles of fairness and justice), (f) exclusive ownership on the part of the mineral rights holder who severs it [the Court *a quo* chose (f)].

The A. D. held that the object of each part was to use his **own right** for profit and should not harm his neighbour - for each part had to be prepared to suffer those disruptions of his rights which it was reasonable that the other part should impose. Where the other man's ore can be set aside that should be done; where the separation can be achieved only at later stage, then separation has to await that later stage; if mixing of ores from different sources was necessary (as in this case) then there should be mixing. Hence, ores mixed with other ore are lost unfortunately by *commixito* (the coming together of the mixing). In conclusion, the A. D. favoured the acquisition of co-ownership of the right holders of the ore, despite it being an unusual, atypical manifestation of that institution. The reasons for this unusual co-ownership are because of (i) the parties retained different rights upon the ore being

separated (ii) such co-ownership was obtained only after the ore was refined (iii) the right to abuse the property (*jus abutendi*) is possible here (this is unusual) and (iv) finally, the co-owner has no right to veto in respect of the other mineral.

Gleason (1996), in his article "Mineral Rights: Loss of certainty" argues that this landmark judgement has the potential to complicate the existing mineral rights system even further. Commenting on the same judgement, a legal adviser to one mining group concluded that: "this (judgement) creates an extraordinary mess for everyone. ...New mining decisions until this clarified .. probably through a new Act will be fraught with uncertainty and many may be delayed" (Gleason, 1996:3)[3].

3.3.5 In the case of Erasmus v Afrikander Proprietary Mines Limited 1976 (1) SA

The Court found that the respondent (Afrikander Proprietary Mines Limited) had the right to mine its proportionate share of the coal deposit as long as it did not prejudice the applicant's (Erasmus's) rights. The applicant is the holder, under deed of cession of mineral rights, of an undivided 1/520th share in the mineral rights in respect of the farm Brakfontein. Afrikander is the registered holder of an undivided 517/520th share in the mineral rights. The applicant requested the court that the respondent should not be allowed to carry out any mining without his authority.

Although the applicant was the holder of no more that 1/520th undivided share in the coal rights in the Brakfontein and the respondent was the holder of a 517/520th undivided share,

the respondent could not interfere or prejudice the applicant's rights without his consent. Before the law the applicant's and the respondent's rights were equal irrespective of the fact that the applicant was holder of only 1/520th undivided share of the rights.

This case clearly demonstrates the extent to which the current mineral rights situation can inhibit mineral development. As long as the current mineral rights policy remain in force this kind of a situation can not be avoided. The mineral right as a right gives equal rights to co-holders of mineral rights irrespective of the size of the mineral rights holding.

3.4 Sterilisation of Mineral Rights

Sterilisation of mineral rights causes the inefficient and inequitable use of mineral resources. According to Kruger *et al* (1991) there are three major factors which led to sterilisation and fragmentation of mineral rights and thereby militate against optimal exploitation of South African mineral resources. These are:

i) different laws for different commodities, some of which occur in the same mine or deposit;

ii) the relevant legislation differs throughout South Africa; and

iii) The definition of the boundaries of mineral rights is based on cadastral data and does not take into account the geological boundaries of an orebody.

A simple example of the complexities created for the explorationist by the above is the proclamation of Sir John Cradock in 1813 that vested the rights to gold, silver and precious

[3] Name of legal advisor and name of the mining company withheld by Gleason.

stones in the State but no other minerals (Kruger F. J at el, 1991). Since this only applies to the Cape Province, it means that only in this part of South Africa specific minerals mentioned are consolidated under the State, whereas all other rights to the same land may be endlessly subdivided. The above scenario could lead into the sterilisation of mineral resources.

Most of the sterilised mineral rights belong to private mineral rights holders, namely private companies, individuals and farmers who might own the surface and mineral rights. Mining companies, such as JCI, by their own admission have assesses their mineral rights portfolios and made properties available they classified as not part of their core business. This indicates that the mining companies have been sitting on viable deposits. Such a situation is unlikely to change unless there are disincentives for holding mineral rights without exploitation or there is a change in the ownership system.

3.5 Expropriation of Mineral Rights versus Nationalisation

The existing South African law allows the State to acquire land or mineral rights by expropriation in terms of the Expropriation Act 63 of 1975. This expropriation is subject to fair compensation being paid. A "fair" compensation is measured by the market value of the property (right), the amount to make good of the actual financial loss caused by the expropriation and the *solatium*[4] in terms of the Act.

The role of the Expropriation Act 63 of 1975 is to ensure the enjoyment of the fundamental right (mineral right) and the freedom that goes with it, **not to create a new source of**

[4] solatium implying the whole (full) compensation

power for the state, but rather to be used for curtailing them. Evidently there is no record whereby the Minister has applied the Act pointing to the fact that there is general agreement between partners when dealing with mineral rights issues or that the Minister lacks the seriousness to employ the Act.

Nationalisation on the other hand creates different source of power whereby an asset is placed under the control of nationals through the State taking possession. It may be done with or without a 'fair' or market related compensation to the previous holders. This form of acquisition of mineral rights was practised in many independent countries, e.g. Jamaica, Zambia, Zaire, and Tanzania during the 1970s (Brown, 1986).

There are distinct differences between expropriation and nationalisation. In the first case compensation is paid according to the market value of the property and the State may not be involved in the actual mining business. In some cases the State participates in partnership with the private sector, e.g. Botswana government and De Beers. Nationalisation involves acquisition of mineral rights with or without a fair compensation of the property. In this case the State is directly involved in the actual mining business. The disastrous economic consequences caused by nationalisation resulted in near collapse of the mining industry in those countries where it took place. Currently most of these countries, e.g. Zambia, Zaire and Chile are engaged in reprivatisation of the mining industry.

3.5.1 The Cost of Expropriation of Mineral Rights

P. J. Badenhorst et al (1994) in an article "Proposed Nationalisation of Mineral Rights in South Africa" outline the factors that influence the market value of a mineral as:

a) Factors inherent to the mineral deposit, namely:

i) The location of a mineral deposit;

ii) The statutory and common law restriction imposed on the exercising of rights by the owner or holder of the mineral rights; and

iii) The physical features of the mineral deposit; and

b) Macro and micro market forces.

According to Badenhorst et al (1994) three categories of mineral rights can be acquired by the State by expropriation:

i) mineral rights in the hands of unaware private individuals who are not in a position to mine;

ii) mineral rights in the hands of mining companies in respect of which no mining infrastructure has been established and which are held in stock for future exploitation;

iii) Mineral rights held by mining companies in respect of which mining infrastructure had been established and which rights are being actively mined.

Of the above mentioned mineral rights, category c) will be the most valuable due to the infrastructure created to make it possible to have access to the mineral deposit and mine it.

Currently there is a brisk and competitive market in mineral right options, whereby the mineral right holder confers the right to explore and purchase such mineral right on the

grantee. Van Rooyen (1993) estimates that such options currently trade at annual exploration fees in the range of R5 to R12 per hectare with purchase prices in the range of R1000 to R4000 per hectare. Mineral rights of high potential (proven reserves) will be more expensive than the price in the above-mentioned range.

The data given in Table 4.2 indicate that mineral rights held by private companies are estimated to cover about 3295 000 hectares. At a price of R4 000 per hectare the State would need approximately R13 billion to compensate for the expropriation of the mineral rights in the hands of private companies. Since companies and individuals hold the richest mineral rights, the bill for compensation will be far higher than the conservative estimate given here.

Vorster (1994) gave another estimation of the value of the privately held mineral rights in his paper "Mineral rights as real property cannot be arbitrarily alienated". He estimates a value of R50 000 per hectare and an estimation of approximately R165 billion for the total bill for the 3295 000 hectares. The annual interest (15% per annum) on government paper would be about R25 billion.

Badenhorst *et al* (1994) concludes that expropriation at large scale is unlikely due to several reasons. These are; firstly, that the administrative burden and costs involved in determining and tracing the holders of all mineral rights in South Africa would be enormous. Secondly, the administrative burden and litigation costs involved during the expropriation process in terms of the Expropriation Act 63 Of 1975 would be enormous and finally, the compensation payable for such mineral rights would run into billions of rands (R71.2 billion as calculated by Vorster).

It is clear from the above that the aim of the State in expropriation should be based only on the need to achieve optimal utilisation of minerals and therefore uphold public interest, which in turn would lead to economic growth and better living standards for all the citizens.

3.6 Conclusion

The mineral rights system of South Africa is fairly complex with both the state and private concerns owning mineral rights. The system has been further complicated by subsequent legislation that separated the ownership of mineral rights from that of land. Legislation has also permitted the ownership of different minerals in the same orebody by different parties.

The study cases point to some of the legal processes required to be undertaken in order to access mineral rights. SMM companies would not have the legal and financial resources to invest in such legal processes. Furthermore, each court ruling set precedence for subsequent cases. These rulings therefore set the basis for future ownership of mineral rights. For example, the case of Trojan Exploration v Rustenburg Platinum Mines Limited clearly demonstrates the complexity of the South African mineral rights system. Assuming instead of Rusplats there was a SSM company involved, the consequences of the litigation may practically ruin the SSM company if not put it out of business completely. In the case of Erasmus v Afrikander Proprietary Mines the difficulties of acquiring mineral rights are also highlighted. Again, SSM companies would not be well positioned to deal with such delays due to costs on capital caused by the delays.

As much as it is necessary to change some aspects of the current mineral rights policy,

caution must be exercised in order to avoid the use of antiquated means of redress such as nationalisation of the industry. Nationalisation will also contravene the Bill of Rights and would be similar to the methods that were employed to deprive communities of their land and other rights during the apartheid years.

In a time when most countries have moved away from nationalisation as a form of acquisition of land and mineral resources, it is unlikely that the ANC government will repeat Zambia and Zaire's mistakes. Nationalisation of copper and cobalt mines exacerbated the collapse of the industry in the above-mentioned countries.

It is clear the government does not seem to have either the capacity or the desire to run the mining industry (Segal, 1994). Based on the experiences of the above-mentioned countries, nationalisation as means of rationalising the redistribution of wealth, optimising exploration and exploitation of mineral resources will not be a viable option.

Expropriation under the Expropriation Act 63 of 1975, although a likely avenue, has its own flaws. The main question is whether the government may afford the costs involved in the 'fair' compensation of privately held mineral rights, which may run into billions of rands estimated to be R165 billion. Pressed by the need to improve living standards of her citizens, South Africa does not have the resources to pay for the expropriation of the mineral rights under private ownership.

CHAPTER 4

THE CURRENT STATUS OF MINERAL RIGHTS

4.1 Introduction

Two schools of thought concerning mineral rights exist in South Africa. The Chamber of Mines favours the current mineral rights system as the most appropriate for South African conditions. On the other hand the ANC and its trade union alliance, aspirant SSM companies and artisanal miners view the current status as favouring the big mining houses (Minerals and Mining Policy Workshops, 1996).

The proposed mineral rights policies vary from "Proposed Nationalisation of Mineral rights in South Africa" (Badenhorst *et al*, 1994), to the National Union Mineworkers' (NUM's) proposal to tax companies which do not exploit or explore for minerals in their lease areas within a "reasonable time" (Robinson, 1995), to changing the existing situation completely (Kruger, de Wit and Levin, 1991) and upholding of the *status quo* (van Rooyen, 1993; Dale, 1996).

4.2 Common Objectives

Notwithstanding the different views concerning a new mineral right system all the interested parties have some areas of common interest. They all agree that the policy should assist in identifying suitable deposits and ways of making them available to small scale operators, encouraging mineral rights holders, both State and private, to use them,

establishing mechanisms to support and organise small scale mining and balancing the needs of security of tenure and State interference. Simultaneously, the mineral right system must not negate the LSM industry. The State interference is only condoned when its objective is optimal exploration and exploitation of the mineral resources (Vorster H., 1995).

In order for the RDP, as set out by the government of national unity, to succeed all efforts are required from every section of the South African economy and population. In this regard, it is essential that mining continue contributing its share to the growth of the national economy. Therefore, the State interference should ensure that this objective is fulfilled.

4.3 Areas of Disagreement

There are several areas of disagreement among the stakeholders, i.e. the ANC, mining companies, tribal people and aspirant SSM companies, with regard to the current mineral rights system. The borne of contention is that, the system is not conducive to the optimal exploration and exploitation of mineral resources and the system supports maldistribution of the benefits arising from mining. Consequently various views, depending on the background, on the choice of the new mineral rights exist among the interested parties (Robinson, 1995).

4.4 Dale's Model of Mineral Rights Policy

During the Minerals and Mining Policy Workshop (1996), Dale presented a model policy for mineral rights in South Africa. His proposed mineral rights policy was used as the point of reference for the debate on mineral rights.

Dale (1996) proposed a hybrid two-tier system of mineral rights. He envisages a system tempered by a licensing mechanism and by the right to expropriate that would provide a compromise and enable the achievement of the best of all worlds, namely for those who wish to see complete State ownership of mineral rights and for the advocate for private ownership of mineral rights. The system is seen as a compromise between a wholly private mineral rights system and a wholly public mineral rights system and will be based on a two-tier system of holding of mineral rights subject to control by a licensing mechanism and by State expropriation where necessary. The main objectives of the system will be to:

i) to achieve a non-adversarial result;

ii) to promote optimal exploration;

iii) to create investor friendly climate: certainty;

iv) to give access to small scale operators and

v) to improve access to other investors, foreign and domestic.

Advantages envisaged by this system are that:

i) It provides the benefits of private ownership based on the law of property, while simultaneously providing the benefits of a State system;

ii) It avoids the unfavourable factors of both a private system and those of State system; and

iii) While preserving private mineral right holdings it gives the State the facility to turn existing State mineral right holdings to account by promoting them for foreign and SSM and artisanal investment using existing mechanisms in the existing legislation.

In order to improve the implementation and administration of the two-tier system Dale proposes the following guidelines for the State mineral rights:

i) State should identify and advertise mineralised areas available for investment, be it small-scale, medium, large, foreign or domestic. This applies in areas where the State is the holder of the mineral rights;

ii) State should establish standardised procedures, terms, conditions, consideration, forms for acquisition by investors of mineral rights;

iii) State should simplify the administration of mineral rights.

Dale's approach to private mineral rights requires the mineral rights policy to publish and explain the policy to potential investors. The explanation should include how to access Deeds Office information, acquire rights and overcome perceived difficulties with shares. The model also aims at encouraging private mineral rights holders to further their efforts at identifying and making available surplus mineral rights for small scale development.

In respect to all mineral rights, Dale proposes that the Policy should recommend:

i) Expediting the computerisation of information in regard to mineral right holdings at Deeds Offices and the provision of funds to this end;

ii) Overlaying of the mineral diagrams system onto the land diagram

system and recording of the geological information that is in the public domain;

iii) Recording identity of holders of geological information as part of Deeds Office records;

iv) Equipping of Regional Directors' offices as an advice and information facility and

v) Establishment of advice bureaux for small-scale mining operators.

The ultimate goal of Dale's proposed model is to promote investor confidence and to afford more efficient procedures to ensure access to acquisition of mineral rights for all investors, large, medium, small, artisanal, domestic and foreign. This model, however, is essentially that of creating a market for minerals rights, with limits to the standard free enterprise market.

4.4.1 Opposition to Dale's Policy Model

Dale's mineral rights policy model is opposed on the grounds that it seeks to uphold the status quo negating the fact that currently mineral rights are held in an extremely complicated and inflexible way by a multitude of holders. Kruger (1996) proposes transformation that benefits all and that is not based on coercion. Coercion, he postulates, will build resentment within the industry. He therefore indicated the following as the requirements for the transformation:

i) There must be access to mineral rights or land for exploration as well as the availability of technical information, preferably at a one-stop-shop;

ii) The system must be able to address the diverse claims of tribal and other communities and individuals of their rights in the past;

iii) The holders of the mineral rights must able to derive the benefit of ownership;

iv) Licensing and other permissions must be easily obtainable from the one-stop-shop to encourage small operators and

v) The ownership of mineral rights and the right to prospect must be delinked.

Kruger (1996) in his contribution does not acknowledge the achievements that the mining industry has made under the current mineral rights policy.

4.4.2 African National Congress and National Union of Mineworkers

The ANC's Freedom Charter of 1955 states that " *The people shall share in the country's wealth*" and "*The mineral wealth beneath the soil.... shall be transferred to the people as a whole*". This declaration remains the cornerstone of the ANC's approach to mineral rights.

It is widely held within the African National Congress (ANC) and the National Union Mineworkers (NUM) that the Chamber of Mines' belief that the present system guarantees long-term security, is aimed at maintaining the monopolistic position of the mining houses and that this belief has led to the sterilisation of mineral rights (Robinson, 1995). Jourdan (1993), in his discussion of the way mineral rights are held and distributed, cites the major disadvantages of the current system as its racial bias, its inordinate complexity and the fact that most of the promising geological terrains are effectively frozen as the owners of the

mineral rights (the major mining companies) are able to 'sit' on these properties in perpetuity.

The RDP, as stated in the ANC Discussion Document of 1994, seeks the return of mineral rights to the democratic state, in line with the rest of the world which in turn will give the people control over the optimum exploitation of mineral resources. It is also stated that the principal objective of the RDP, with regards to the mining industry, is the transformation of the industry to serve all the people of South Africa.

To achieve this transformation, the government has to consider ways and means to encourage small-scale mining and enhance opportunities for participation by the people of South Africa through support, including financial and technical aid and access to mineral rights. The ANC envisages the possibility of creating special mining zones in which the small-scale mines can be set up (ANC Discussion Document, 1994).

Facilitating access to mineral rights is viewed by the ANC as a means of encouraging greater participation in the mining industry. Unlocking the mineral wealth tied up in privately owned mineral rights is also aimed at ensuring greater access to mineral rights (ANC Discussion Document, 1994). In the case of the State being the holder of all mineral rights, it is argued that this will assist in the creation of a one-stop shop for mineral rights, consequently reducing the cost of doing business for the SSM companies. Not only may this be conducive to junior mining companies, argues the ANC, but it may also encourage foreign investors to look at the mining opportunities in South Africa.

The ANC, in its 1994 discussion document, proposed that a tax on mineral rights be introduced. Such a tax would be wholly deductible against exploration expenditure, and would guarantee the lodging of information with the central authority for further investors. This would result in greater exploration and realisation of mineral potential, an incentive to sell to other new entrants and finally, the possible abandonment to the State, thereby opening it up for new entrants via the licensing system. Such a system, it is argued, would ensure that security and tenure of existing mines remain and new mines could be given adequate tenure through exploration and mining licensing systems such as existing in Botswana.

After independence, Botswana introduced a tax of about $10 per hectare on mineral rights, which could be deducted against exploration costs. The result is that most mineral rights are now State owned (Jourdan 1994).

The ultimate goal of this approach is to allow a retention of private mineral rights for existing operations, but open up the system for unexploited areas. A tax on privately owned mineral rights may also encourage mining companies with unexploited properties to move ahead with exploitation or sell the rights to other companies (Jourdan, 1994)

4.4.2.1 Vaal Reefs-A South African Case Study

Vaal Reefs is the second largest gold mine in South Africa, milling approximately 12 million tonnes per annum at a grade of about 6.4g/t to produce roughly 75 tonnes of gold. From inception in 1944 and from the dates of expansions, Vaal Reefs had produced to September 1993 a total of 220.290 million tonnes ore, at an average yield of 8,9 g/t to

produce 1 987,461 tonnes of gold (Levin G and Handley, 1993). The financial results during this period are shown in Table 3.3.

These results show that despite the fact that the mineral rights do not belong to the State, the State enjoyed a greater return than the shareholders without any capital risk. This case study also illustrates the fact that the flow of benefits from the exploitation of mineral resources is not only dependent upon the ownership of mineral rights. Mining taxation addresses this issue through systems involving royalties and various taxation options to secure a flow of benefits that represents a sharing of the benefits of exploitation between mine operators, other stakeholders and the state.

TABLE 3.3 : VAAL REEFS FINANCIAL RESULTS FROM 1944-1993

ITEM	R MILLION	PERCENT
Total gold revenue	26 583	-
Profit before taxation	12 155	100
Taxation	4 402	36,2
Dividends	3 993	32,9
Capital Expenditure	3 760	30,9

Source: Levine G. and Handley J., 1993

4.4.3 Chamber of Mines

4.4.3.1 Background

The Chamber of Mines of South Africa was founded in 1889. Membership of the Chamber has traditionally been virtually by all gold mines and coal producers in the country. The Chamber of Mines has not organised producers of base minerals and other metals to the same extent as those of gold and coal. Some companies, such as Lonrho and RTZ, have chosen not to join the Chamber mainly for political reasons (Erricson, 1995).

The Chamber of Mines has been (and still is) the policy mouthpiece for the South African mining industry. One of the Chamber of Mines' key activities is its representation of the formalised policy position of its membership to various organs of South Africa's national and provincial governments, and to other relevant policy-making and opinion-forming entities inside the country, and internationally (Chamber of Mines of South Africa, 1996).

4.4.3.2 The Chamber of Mines' Views

Private ownership of mineral rights is criticised for the following reasons:

- That it is not conducive to the optimal exploration and exploitation of mineral resources, and
- That it supports a maldistribution of the benefits derived from mining.

According to the Chamber of mines, the first criticism ignores the enormous success achieved both in mining and in the expansion and growth of the mining industry in South Africa (Chamber of Mines of South Africa, 1996). With regards to the second criticism, the Chamber of Mines argues that the criticism ignores the fact that distribution of benefits from mining is the product of a very complex interaction of factors such as past job reservation, conditions of employment, taxation, mining lease consideration, and shareholding investment in mining companies (whether directly or indirectly through pension funds). Given that influencing factors, i.e. job reservation, conditions of employment etc. were the same there is no reason to suggest that State ownership of mineral rights would have caused any difference to the distribution of benefits derived from mining.

Erricson (1995), in his discussion of the Mining Policy in the New South Africa, outlines three points that are deemed to be of crucial importance by the Chamber of Mines:

i) The mineral rights system is central to the South African industry's leading-edge capabilities in deep-level and large and long-term mining projects. This system has encouraged massive expenditure in exploration and acquisition of mineral rights. To bring all the mineral rights under government stewardship is said to be damaging to the investor confidence and therefore not viable. To seek to transfer these mineral rights to the State would also be complicated, costly and inequitable. It would result in the industry reducing its commitment to the kinds of large technologically complex projects that the Chamber of Mines sees as necessary.

ii) The SSM sector has merits and benefits but can in no way become a major and vibrant force in South Africa. In this respect, it is argued that the

mineral rights held by companies are not suitable for SSM projects and it is possible that the State may have more suitable areas that could be distributed for SSM.

iii) The Chamber of Mines would like to see minimal government interference. It cautions Government against embarking on an interventionist route as taken by other African countries, such as Ghana and Zambia, after gaining independence.

Private ownership of mineral rights makes it possible for the mineral rights to be traded and exchanged. Not only has the security of tenure benefited the big mining houses, but has also benefited the junior companies or individuals as the title to mineral rights can be pledged to obtain development finance. Further to this the Chamber of Mines argues that the existence of private ownership of mineral rights within South African law is consistent with a market economy and is part of the balance struck between private enterprise and state control (Chamber of Mines of South Africa, 1996).

In a paper entitled "Mineral Rights and SSM - The View from Gold Fields" (Van Rooyen, 1993) it is argued that the following should be the guidelines for a poli[illegible]al rights:

- Do not interfere with the free market in private minerals,
- Encourage private sector exploration of State controlled minerals.

Van Rooyen argues that a policy based on the above guidelines may encourage and accommodate both small-scale and large-scale enterprises. Paradoxically this approach has resulted in the marginalisation of the small-scale sector and will not improve the situation. Van Rooyen's guidelines are basically in line with the Chamber of Mines and seek to

maintain the status quo.

Segal (1994:3) in his discussion on "Post-Election Mineral Policy: The case Against Radical Change" said, "the industry's objections to a change of the current mineral rights system is based on the fears of problems that are inherent in publicly-owned mineral rights systems. These can include bureaucratic inefficiency and in some cases malpractice". In his view, by trying to change the mineral rights system, the RDP fails to appreciate the strategic and regulatory powers already invested in the government.

4.4.4 Views of Aspirant Small Scale Miners

Aspirant small-scale miners encompasses all individuals and private companies that seek to exploit the minerals of South Africa at a scale that can not be large- scale or artisanal. The absence of the commercial SSM industry on the South African mining stage is largely due to a lack of access to mineral rights and the lack of venture capital and entrepreneurship. Views advanced by most aspirant SSM mining companies at the Mineral Policy workshop in Pretoria (1996), were that the would-be entrant encounters difficulties stemming from two sources, namely access to mineral rights on a willing buyer - willing seller principle to underlie the negotiations process; and access to and availability of as well as the cost of information (Mineral Policy Workshop Proceedings, 1996). It is also pointed out that although the Mineral Act does require prospecting data to be furnished to the state, in practice companies have applied for perpetual confidentiality.

There is a growing sentiment from spok . ns for aspirant SSM that the government should just usurp dormant mineral rights to nable the small-scale sector to do business.

This was evident from the presentations to the Workshop on Minerals and Mining Policy by many of the aspirant small-scale miners.

4.4.5 The Views of the Provincial Administrators

The provinces (Northern Province and Western Cape) prefer the mineral rights to be under State control (Northern Province Mineral Development Summit, 1996). Unproductive freezing of mineral rights and barriers against the entry of new entrants has been cited as the major reasons for this preference. With no evidence to confirm that State-held mineral rights would result in less mineral development, the provincial governments argue that the crucial factor for continued growth in mineral development is that security of tenure is guaranteed, within statutory time constraints, after exploration is started (Northern Province, Draft Mineral Policy Discussion Framework).

4.4.6 Views of the Tribal People: A Case of the Lebowa

[illegible] al exploitation of the minerals in the Lebowa region could be achieved only with the facilitation of prospecting and mining. The benefits derived from the exploitation of mineral resources should accrue not only exclusively to the entrepreneur and the inve tor, but also to the employees involved in the exploitation process and the local community. Some of the Lebowa Mineral Trust's (LMT's) policies on mineral rights are: a) the LMT endorses the system of free enterprise as this system is attractive to potential investors within and outside the Lebowa region and will lead to the speediest progress of the purposeful minerals development in the territory; and b) the LMT grants prospecting or

mining rights only to applicants who have the necessary technical and financial ability to execute an appropriate exploration or development programme. The LMT"s approach does not seek to exclude the smaller entrepreneur from obtaining prospecting and mining rights.

The tribal representatives (Policy on Mineral Policy Workshop, 1996) argue for the return of the mineral rights in the trust land to the traditional authorities. The appointment of Trustees or turning trust mineral rights to the State is viewed as an infringement of private property and thus counters productive. The tribal leaders also reject the representation of Lebowa by the LMT. On the other hand the LMT supports the view expressed by the tribal leaders. The LMT agrees that the practice of mineral rights being held in trust for local communities requires fundamental review. This therefore invalidates any reason to retain the trustee system.

4.5 Mineral Rights Systems in other Countries

Kruger and de Wit (1987) outline two extreme philosophies with regard to mineral ownership in different countries, depending on their guiding political philosophy. These are (1) total State ownership of both mineral rights and means of production, and (2) total private ownership of both. Many countries fall in the middle ground between these extremes in that the State usually owns some or all mineral rights, and finding and exploration of minerals thereof is usually left to the private sector. The State, e.g. Canada, in effect extracts royalties in return for security of tenure, infrastructure and political stability.

In mo e developed, mineral-rich and highly successful mining countries, e.g. Australia and Canada, there is a tendency toward State ownership of mineral rights but private exploration and exploitation. Zambia, Botswana, Malawi and New Guinea's mineral codes a e contrasted by Brown (1986) to that existing in Zimbabwe. In essence, these codes rest on two principles: a) the right to prospect and mine is granted (often to multinational corporation) in return for specific commitments which can be assessed and monitored by the State, and b) the investment is secure within sensible limits of long term. The State is thus normally a major partner in the mining projects.

In contrast to the legal environment in Botswana and the other countries mentioned above, Zimbabwe has retained its pre-independence mining code (Zimbabwe Mining Code, 1980). The code enshrines a system that ensures that the country as a whole is held open to prospecting and mining by private sector. Claims are kept alive annually by obtaining inspection certificates from the Mining Commissioner. A detailed account of historical evolution of mineral rights in the Southern African Development Community is given in Appendix II.

4.6 Conclusion

The above discussion leads to a clear conclusion that the majority of the stakeholders, e.g. foreign mining companies, aspirant SSM companies and ANC, in the South African mining industry dispute the fairness of the current mineral rights system. The question of the unfairness of the mineral rights system is not on debate but rather the future mineral rights system. Though seemingly clear that the current mineral rights system is unfair there are strong arguments for both abolishing and retaining the system as it is. There is therefore

a strong case for looking at the current mineral rights in order to formulate a system that encourages more participation in the mining industry by foreign companies and smaller local companies. Hence, it is inevitable that the present system may not be retained as it is. In order to bring about this change, it may be necessary to simplify the very complex legal procedures to change ownership and facilitate access to mineral rights.

Dale's model mineral rights policy seeks to retain the current mineral rights system in South Africa. This structure while allowing the trading of mineral rights, may continue to benefit the large mining houses who have legal and financial resources and ignores the need for a one-stop shop for mineral rights, which is one of the main benefits of the State owned mineral rights system. A one-stop-shop concept has worked well in countries where the mineral rights are under State ownership. Dale's approach tries to evade the current problem of access to mineral rights by pushing it forward for future generations.

The ANC's proposed solution in its current position of authority strikes a more reconciliatory accord with the mining houses than its pre-election approach. As the government gains more confidence in its macro-economic policies, it will be under pressure to deliver on some of its pre-election promises regarding the redistribution of wealth and mineral rights in particular. The government's main efforts, as stated in the ANC's views, will be the equitable distribution of the wealth derived from South Africa's mineral wealth, provision of access to mineral rights on a non-racial basis and creation of an environment for growth in national economy fuelled by both domestic, foreign, small and large investors. The government has ruled out nationalisation of mineral rights but it is likely to institute some form of taxation as a disincentive for holding on to undeveloped

mineral rights, thereby encouraging the mining houses to reduce their mineral rights holdings.

The Chamber of Mines' arguments on the retaining of the current mineral rights system in order to ensure security of tenure in the industry is unlikely to persuade the government to maintain the *status quo*. A positive approach by the Chamber, as shown by JCI, De Beers and Anglovaal (Wadula, August 13, 1996), could assist in diffusing the current hostile attitude in which the Chamber is held.

Although the Chamber of Mines is regarded, by the ANC and its alliance, as aiming to maintain the *status quo* there is need to fully appreciate and understand why we are where we are with the current system. The State mineral rights have a portion of inefficiency and are also associated with less development. The underdevelopment has been attributed to the fact that there is a lower degree of prospectivity on State mineral right holdings. Hypothetically, this shows how mining houses, under the prevailing mineral rights system, have efficiently approached their exploration and mining programs.

CHAPTER 5

MINERAL POLICY MODEL

5.1 Introduction

The model that South Africa should follow should be that of Swaziland (Appendix II), where the entire country have been divided out into concessions of some form or another. This model represents the closest similarity to the South African mineral rights situation where the entire country is divided into concessions belonging either to the State, companies or individuals. In 1958, the Swazi nation placed a tax on all concessions. To date all mining concessions are under State control. This was achieved without having to pay any compensation to the private owners. It is argued that the tax worked as a disincentive for withholding mining concessions.

The model need not be adopted without specific consideration of the South African situation. For example, the application of a mineral rights tax might not be workable because of its inherent administrative constraints. South Africa has a developed mining industry (compared to that of Swaziland) which has been security of tenure driven. Any imposition of tax on mineral rights and the consequent reverse of mineral rights to the State could result in poor investor confidence.

5.2 The Mineral Rights Policy of Swaziland

The mineral rights situation in Swaziland after it gained independence in 1968 was summarised by Levin and Handley (1993) in their discussion of the Evolution of Mineral Rights in South Africa (originally summarised by Leistner and Smit in 1969) as follows:

"..practically the whole area of the country was covered two, three or even four deeps by concessions of all sizes, for different purposes and greatly varying periods. In but a very few cases were even the boundaries defined, many of the areas had been subdivided and sold many times, and seldom were the boundaries of the superimposed areas even coterminous. In addition to this, concessions were granted for all lands and minerals previously unallotted or which had been allotted, might lapse or become forfeited. Finally it must be remembered, that over three or four strata of conflicting interests, boundaries and periods, the natural rights of the natives to live, move, cultivate, graze or hunt had to be preserved.

"As might be expected, various problems arose over land rights and this was one of the most pressing matters that claimed the attention of the British authorities when they took over the administration of Swaziland after the Anglo-Boer War. A commission was appointed to investigate the land question and its recommendations took the form of the Concessions Proclamation (No. 28) of 1907. According to this proclamation one-third of all mineral rights held by concessionaires had to be ceded to the Swazi nation. If the Swazis wanted more land, compensation had to be paid, in which case special permission had to be obtained from the High Commissioner. The Swazis had no rights in respect of

two-thirds of the areas held by concessionaires, but they could not be removed before a period of five years had lapsed.

"Mining rights were granted with other surface concessions, and this complicated the entire concession problem and retarded the country's mining development. The commission appointed in 1904 to investigate the concession prob' urveyed the mineral concessions and determined which were in force prior to and which were in force subsequent to the granting of the surface concessions on the same area. Measures were taken to reconcile conflicting land and mineral concessions in Swaziland Surface Rights Proclamation (No. 12) of 1910.

"In 1958 the Swaziland Mining Proclamation was promulgated which introduced a tax on all mineral concessions whether or not they were being exploited. If concessionaires refused to pay the taxes the rights could be transferred to the Crown.

" The taxation induced many holders of minerals concessions to surrender their rights. Before the Proclamation came into effect in 1958 mineral concessions were held by private persons or institutions on 51.57 per cent of the surface area of Swaziland. In 1965 the Crown (at present the Swazi nation) exercised full control over mineral rights over 87.03 per cent of Swaziland's surface area.

By the time of independence in 1968 between 40-50 per cent of the surface land had been restored to Swazi control and the proportion in the early 1980's was about 67 per cent. According to Levin and Handley since then there has been continuation of the process and today all mineral rights are now vested in the Swazi nation.

5.3 Conclusion

The mere existence of interesting mineralisation does not ensure that a viable mine can be developed, particularly by small operators. Even assuming ownership of mineral rights and adequate geological information, successful mining requires appropriate funding, skills and technology. An environment where small operators have access to these requirements is needed. It is argued that even before the finalisation of the new mineral policy, moves are being made already to accommodate the small mining investor. For an example JCI and De Beers have started a process of releasing those mineral rights that are suitable for SSM but do not meet their viability criteria.

Simplification of the mining laws is vital. The simplification of the mineral rights system will benefit both the small-scale and large-scale mining companies by removing the complexities caused by subdivision and open up sterilised reserves for exploitation by other interested parties.

The need to rationalise the procedures and processes of acquisition of mineral rights and the equitable distribution of mineral rights can not be underestimated. It is vital, however, that all facets of this rationalisation are considered without emotions.

Importing any system that might have worked in any other country without prior considerations of the specific aspects of the South African mining industry should be discouraged.

CHAPTER 6

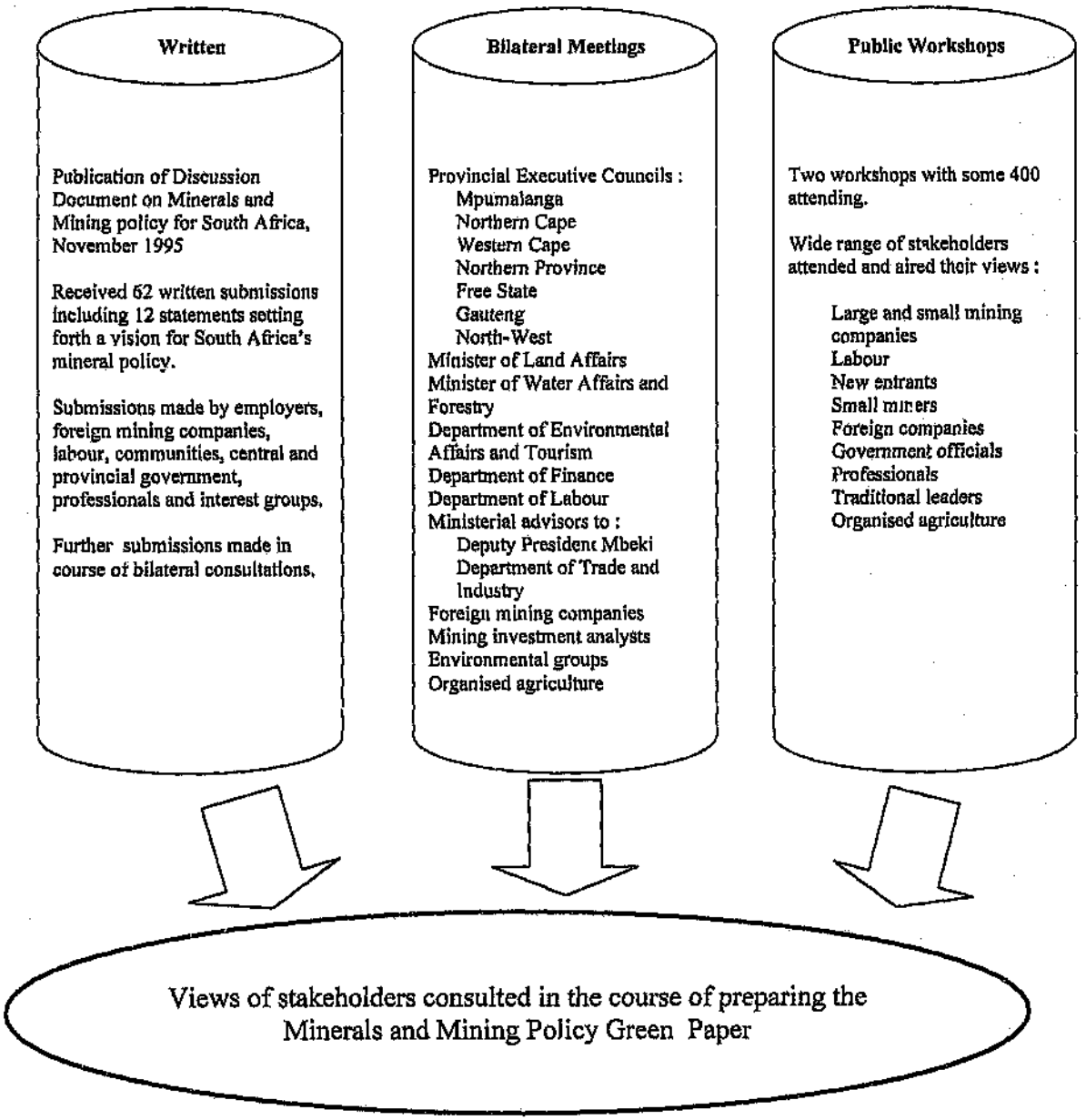
FORMULATING A POLICY FOR THE SSM INDUSTRY

6.1 Introduction

The Minerals Policy Process was initiated by the appointment of the Steering Committee, which operated with the mandate to manage the process of mineral policy formulation in an open and transparent way allowing for full stakeholder participation. Three main consultative actions were organised as shown in figure 8. A total of 62 written submissions setting forth a vision of South Africa's mineral policy were received. Employers, foreign mining companies, labour, communities, central and provincial government, professionals and interested groups also made submissions. Various government departments, central and provincial and all the interested parties then engaged in bilateral meetings, which culminated into public workshops.

The responsibilities of the Steering Committee were to summarise all the recommendations and proposals from the public meetings into a chopping block document, which was later used as a reference to the preceding public meetings and bilateral consultations. To date the process has reached the stage whereby the Minister of Minerals and Energy has presented the white paper on the Minerals Policy to parliament.

FIGURE 8: MINERALS POLICY PROCESS



Source: Discussion Document on a Minerals and Mining Policy for South Africa (1995)

6.2 Policy for the SSM Industry and National Objectives

The mineral rights should be a component of the policy on minerals, which in turn is part of a broader national economic policy. It should therefore enable the SSM sector to optimally exploit mineral resources alongside the mining industry as a whole, and thereby contribute to the overall national objectives (Buck K. W. and Elver R.B., 1970). The mineral policy cannot be formulated around SSM, but SSM must be accommodated as part of the broad overall picture. Compared to LSM, SSM requires assistance in putting up infrastructure like roads and electricity. The ultimate goals of the mineral rights policy are to provide easy access to mineral rights and an equitable distribution of mineral rights together with security of tenure of land which will result in the derivation of maximum benefits for South Africa out of the minerals won from the land and achieving optimum allocation of mineral extraction between present and the future.

Policy objectives in support of these goals are as follows:

- Relate mineral development by the SSM sector to social needs. The exploitation of a mineral resource should not be to the detriment of the socio-economic development of the inhabitants of the territory;
- Minimise the adverse effects of mineral development by the small-scale mining industry on the environment but make allowances so that compliance costs do not kill the project. The LSM industry, because of its experience, can help in advising the SSM companies on best ways for minimising environmental damage;
- Foster a viable SSM sector by letting the industry run on a competitive base. This requires the State to assist the sector with those essential requirements like roads without undue subsidisation of the sector;
- Ensure national self-determination in mineral development and

- Strengthen the contribution by the SSM sector to regional/national development. The benefits derived from the SSM, as well as from the LSM sector, should not only accrue exclusively to the entrepreneur and the investor, but also to the employees involved in the exploitation process and the local community.

6.3 Role of State Institutions

In as far as the SSM industry is concerned the state should not discriminate in favour of the sector. However, the state institutions should play a facilitating role to lessen entry barriers that the SSM sector faces with regard to acquisition of mineral rights.

The duties of the government departments are indicated in the Minerals Act, 1991 as follows, "To regulate the prospecting for and optimal exploitation, processing and utilisation of minerals, to provide for the safety and health of persons concerned in mines and works, to regulate the orderly production and the rehabilitation of the surface of land during and after prospecting and mining operations, and to provide for matters connected therewith".

It is clear from the above statement that the government's role is in regulating and controlling the SSM (mining) industry, ensuring that the national interest is protected as far as possible. Through the provision of infrastructure and services and the establishment of a sound institutional and legislative regime, the government can provide the stable framework within which SSM can develop (Jennings N. S., 1993).

6.3 Moral Consideration

From a purely moral point of view, the assessment of any proposal relating to the utilisation of State owned mineral resources should take cognisance of the concept that the State includes the total population. As far as mineral rights are concerned, they should therefore be considered not as the property of the government or civil service, but rather as public property. The Department of Minerals and Energy is therefore seen in this role as being appointed by government to manage this property in public interest on the same basis as any private owner would manage his own property (Department of Minerals and Energy, 1994).

6.4 Conclusion

The South African minerals policy formulation has been approached democratically with all stakeholders being offered the opportunity to present their views. The inherent advantages in the formulation process are that the process is transparent and does not voluntarily exclude any particular interested groups. The resultant policy should therefore reflect the opinion of the majority of the stakeholders. Its disadvantages are because of the democratic process that has been followed, South Africa has been almost without a minerals policy since 1994. The resultant policy might not, even though it may be the opinion of the majority of the stakeholders, be necessarily the best of the growth of the industry.

CHAPTER 7

A MODEL POLICY TO PROMOTE THE SSM INDUSTRY

7.1 Intent

Government will encourage and facilitate the development of the small exploration and mining sector and will provide advice to them based on business principles.

7.2 Policy Requirements

i) Due to the complexity of South Africa's mineral rights system, SSM require information on the availability of mineral rights.

The model policy to promote the SSM industry will provide access to mineral rights for SSM by improving the quality and availability of information on mineral rights by way of computerisation. Accessing the computerised database will be possible from the different provinces of the country. On this database the mineral rights will be registered and past results of exploration will be recorded. The availability of past exploration data will reduce the time spent on exploration and at the same time gives the previous mineral right holder the chance to recover costs.

No accurate records are available on the exact mineral rights holdings by both the State and

private sector. A national audit of these mineral rights should be conducted. This can assist in identifying State mineral rights that are amenable to SSM. The audit will also assist in identifying the privately owned mineral rights that are locked-up (held up not as a long-term business plan).

ii) Access to mineral rights and to the areas necessary to exploit these rights is required.

In terms of sections 6, 8 and 9 of the Minerals Act (1991) the Regional Director without the prior permission of the mineral rights holder may issue no prospecting or mining authorisation. Despite all the provisions relating to the issue of prospecting or mining authorisations the Act is no way prescriptive regarding the approach of the mineral rights holder when the granting or refusal of such permit is considered.

In cases where the State is a mineral rights holder, sections 6(3), 8(2) and 9(2) of the Act provide that the Minister of Minerals and Energy can grant the said permission. This points to the fact that it would be relatively easy for the State to provide SSM companies with access to its own mineral rights. Therefore, it is more appropriate that the State first look into ways of improving access to mineral rights in areas where the State is the mineral rights holder before looking into privately owned mineral rights.

According to Section 43 of Minerals Act of 1991, immediately prior to the commencement of this Act, a landowner could lay an exclusive claim on the mineral where the State previously owned the mineral rights to precious stones and precious minerals. The landowner is also deemed the sole holder of the right to such mineral in respect of such

land for a period of five years or any longer period as may be approved by the Minister. This particular section inhibits access to mineral rights to the previously disadvantaged groups since these groups do not land or own very small tracks of land. To provide an equitable distribution of the said mineral rights there is need to revise Section 4 and amend it to fit with the democratic situation prevailing in the country.

iii) A register on mineral rights should be compiled.

At present, there is no register for mineral rights and different rights to minerals can be ceded at various stages from various titles. Also the certificate to all rights to minerals can be subdivided into a prospecting contract; a cession of diamonds rights, from which a prospecting contract and mineral lease can be issued; a mortgage bond can be taken out on the rights; a cession of gold rights and a cession coal rights. A register of mineral rights will therefore be compiled in conjunction with the one-stop-shop.

The one-stop-shop will consist of two components. These are: a register for mineral rights, which will provide access on the availability of mineral rights; and a record of potential mineral resources, which will provide access to physical information about mineral resources. As far as the second objective of enabling conditions for SSM development is concerned, the Department of Minerals and Energy's section of mineral promotion is in the process of implementing a project in co-operation with the Council for Geoscience and other government departments. The aim of this undertaking to set up a Geographical Information System (One-Stop-Shop), to be managed by the Department of Minerals and Energy, which will contain national information about mineral deposits, mine dumps, prospecting and mining permits and licences, etc. Together with the register of mineral

rights the system will give a comprehensive one-stop-shop for mineral rights, known ore deposits and geological occurrences.

iv) The section of the Department of Minerals and Energy responsible for SSM should be strengthened.

The existing section in the Directorate Mine Economics of the Department of Minerals and Energy that deals with issues related to SSM is essential and should be strengthened. This section assists the small mining companies with the necessary information on mineral rights and suitable geological occurrences and also negotiates leases with mineral rights holders on behalf of the SSM companies. The section will also assist the SSM companies with the negotiation for mineral leases with the Minister of Minerals and Energy in the case where the Government owns the mineral rights.

For effective functioning, the section of the Department of Minerals and Energy that deals with issues relating to SSM will work together with other governmental and non-governmental institutions in identifying mineral rights suitable for exploitation by the SSM sector. The following institutions are critical in assisting the SSM sector with access to mineral rights:

a) The Council for Geoscience will provide geological information on mineral occurrences;
b) Industrial Development Corporation and parastatal finance companies will provide the finance for acquisition of mineral rights which have been properly evaluated and found to be of economic value;
c) The Minerals and Energy Policy Centre will liase with communities and

source their support.

d) The Council for Science and Industrial Research will evaluate the nature of the mineral occurrence in order to develop the necessary technology to be used in mining and pro essing of the mineral and

iv) Technical assistance and training is required for SSM in the broad spectrum of the mining activities.

Evaluation or appreciation of a mineral right requires some knowledge of technical evaluations of such properties. SSM, especially those emerging from the artisanal type of mining do not posses the expertise to carry out these specialised techniques. Assistance is therefore required with regard to these matters.

v) Access to investment finance is required.

In setting a SSM adequate finance is one of the prerequisites for the success of the project. Finance is required initially for the purchase of mineral rights and for prospecting and exploration. The SSM sector need to be developed through finance and support of organisations such as the Small Business Development Corporation (SBDC), the Industrial Development Corporation (IDC) or any other similar organisation, which require that the enterprise be run in accordance with sound business practices.

This component and component iv, above aim to facilitate the SSM companies access to finance and to appropriate mining and processing techniques. There is a close relationship between technical and financial issues. Reducing risks, and enhancing or assuring the

profitability of a small mining project can, in principal, only be achieved with better knowledge of geology and geometry of the deposit, and the use of appropriate mining methods and techniques for increased productivity. This information can only be gathered by implementing a comprehensive prospecting programme and hiring experts in geology, mining and processing. As financial institutions and investors require a return on their investment, they are unlikely to provide capital for projects that have not been planned and evaluated sufficiently to give a reasonable assurance of potential for such a return.

vi) Disincentives required for discouraging the locking-up of mineral rights.

The introduction of a mineral rights tax or application of the "use it" or "lose it" principle could be used to discourage the lock-up of mineral rights simultaneously encouraging new entrants and foreign investors. A mineral right tax is more preferable as it does not set a time frame for a company to use or lose its mineral rights. But due to the administrative constraints in the Department of Minerals and Energy such a tax could be very costly to impose unless there are proper mechanisms to enforce this tax it may yet be another form of red tape to the mining industry. The impact of such a tax on the mining industry should be investigated to the fullest.

With mineral rights not amenable for LSM reverting back to the State plus the State owned mineral rights a one-stop-shop can then be created. The purpose of the one-stop-shop would be to bring together all the necessary information on mineral rights (ownership and location), geological information and past exploration results under the Directorate Mine Economics in the Department of Minerals and Energy. It is necessary that the Directorate Mine Economics liase with other directorates in processing of mineral rights

leases and identifying possible geological occurrences suitable for SSM activities.

The new mineral rights policy will be introduced gradually to cushion the adverse effects of a speedy implementation on the industry. The suggested period for implementation will be five years.

7.3 Policy Proposals

i) Information on all aspects relating to mineral development (including mineral rights) and exploitation will be made available by the Department of Minerals and Energy by means of a one-stop shop.

ii) Information on State owned mineral rights available for development should be widely published for the benefit of the mining industry, particularly, of SSM. The information in regards to mineral right holdings at Deeds offices will be computerised and funds will be provided to this end.

iii) Mining companies with substantial holdings of mineral rights will be encouraged to examine their portfolios regularly, with a view of identifying potential areas they do not wish to mine and making these available to other developers, especially SSM. Disincentives or incentives will be used to discourage locking-up of mineral rights by the private sector without jeorpadising future business plans for the sector.

iv) Government will interfere in common rights in order to achieve object of optimal utilisation of minerals. Government should be able to use the Expropriation Act, in

order to allow prospecting and mining. Grounds for expropriation should be of public interest.

v) Uniform laws (simplified) and regulations will apply to both LSM and SSM.

vi) The Department of Minerals and Energy, in conjunction with other relevant Government departments, will streamline the regulatory and administrative procedures in respect of mineral exploration, mineral exploitation and acquisition of mineral rights or mineral leases. The easing of access to mineral rights will apply to those mineral rights owned by the State.

vii) Government departments, development agencies and provincial governments will work towards co-ordinating their activities in respect of the promotion of small-scale economic activities.

viii) To encourage proper governance of the SSM sector the Government will not give ***cash handouts*** to the sector. A development fund run on commercial basis will be set up to support SSM.

ix) Government will establish advice bureaux for small-scale mining operators in all the provinces.

7.4 National SSM Development Framework

In order to achieve the objectives of establishing enabling conditions for SSM development

and the objective of alleviating the constraint of accessing mineral rights, technical and financial constrains, as stated in the policy proposals a framework has been developed. This structure is composed of two main components, which are the National Steering Committee of Service Providers to the SSM sector (NSC) and the Regional SSM Committees.

7.4.1 The National Steering Committee of Service Providers to the SSM Sector

In order to streamline the institutional support required to assist the aspirant SSM projects through the pre-feasibility stages of the project, the NSC will be established. The NSC comprises:

- Department of Minerals and Energy (beraux for SSM)
- Council for Geoscience
- CSIR Miningtek
- Minerals and Energy Policy Centre (MEPC)
- Khula Enterprise Promotion
- Industrial Development Corporation (IDC)

Various working groups within the NSC which are tasked with establishing systems and procedures on key aspects of SSM promotion will be set up. The groups will co-ordinate their activities with the Regional SSM Committees, whose duties are to co-ordinate activities in provinces.

7.4.1.1 The Mineral Rights Sub-committee

The duties of this committee will be:

i) to assist SSM companies who have lodged applications, to have access to information on and to both private and state mineral rights;

ii) To identify mineral rights available for SSM in general;

iii) To obtain information from the regional SSM Committees through Mine Economics Directorate of the Department of Minerals and Energy on SSM companies' application for mineral rights and assistance;

iv) To feed the one-stop-shop input from companies, regional SSM Committees, and national government offices for the brochure on mineral rights issues in the provinces.

7.5 Concluding Remarks

The proposed mineral rights policy is outlined more or less as intents in order to avoid the likelihood of the policy being 'tied down' to specifics that could change for different situations. Hence, a general policy has been adopted. It is vital to note that the government's white paper on mineral rights has now been completed. Its contents resemble those of the green paper on mineral rights and the objectives of the intended legislation are: to 'prevent the hoarding of mineral rights and sterilisation of mineral resources'; the redistribution of mineral rights and the alleviation of the devastating social costs of the

downscaling process. Although it is almost impossible to quantify the jobs to be created by the SSM sector, it is certain than the sector can not be the only solution to the problems of downscaling.

REFERENCES

Badenhorst P. J., Proposed Nationalisation of Mineral Rights in South Africa. Journal of Energy and Natural Resources Law, 1994 v 12, No 3: pp. 287-298.

Barnardo D. J., Access to Essential Information for Mining and Development at the Council for Geoscience. Unpublished.

Begg D., Economics. McGraw-Hill Book Company, London, 1991.

Beukes T. E., Mineral Developments in Developing Countries: Botswana and Papua New Guinea Case Studies: World Mineral Exploration, "Trends and Economic Issues". Resources for the Future Washington DC, 1988: pp. 145-177.

Bhappu R. R., Mineral Investment Decision Making: "A Study of Mining Company Practices". Engineering and Mining Journal, July 1995: pp. 35-38.

Botha R. F., Mining-The Economy's Foundation. Mining Magazine, June 1996: pp. 3-4.

Bristow J. W., Solomon M., Rocha R and van Schalkwyk J. Revised Mineral Policy for Prospecting and Mining. Mineral and Energy Policy Centre, Johannesburg, 1994: pp. 1-7.

Brown E. P., New Mining Codes: Salient Futures. United Nations Centre of Transitional Corporations, 1986: pp. 27.

Buck K. W., An Approach to Mineral Policy Formulation. Minerals Resource

Branch Department of Energy, Mines and Resources, Ottawa, 1970: pp.1-15.

Chamber of Mines, Policy on Mineral Rights. Chamber of Mines. The Chamber of Mines of South Africa, Johannesburg, 1994 : pp. 1-23.

Coetzee C. B., Mineral Resources of South Africa, Handbook 7. The Government Printer, Pretoria, 1976: pp. 39-75, 289-291, 419.

Dale M. O., Mineral Rights. Minerals and Mining Policy Workshops, Pretoria, March 1996: pp. A1-129 - A1-135.

Davidson B., Mineral Rights System Defended. Mining Weekly. August 1995: pp 10.

DMEA., Discussion Document on a Minerals and Mining Policy for South Africa. Pretoria, November 1995.

Down C. G., Environmental Impact of Mining. Applied Sciences Publishers, London 1977: pp.11-27.

Jourdan P., Mineral Rights Tax Would Boost South Africa Mining-ANC. gopher://gopher.anc.org.za, 1994: pp. 4-6.

Kaplan M., and Dale M. O., A Guide to Mineral Rights Act 1991. Butterworths, Durban 1993.

Kruger F. J., De Witt M. J., and Levin G. Equitable Distribution and Efficient Use of Mineral Rights: The Case of South African Minerals Corporation. International Affairs Bulletin, 1991: Vol 15, No, pp. 30-58.

Kruger F. J., and De Witt M. J., Mineral Laws and Greater Equity in a Future South Africa. International Affairs Bulletin, 1987: Vol 1, No 2, pp. 4-18.

Labone B., Guidelines for the Development of the Small-scale Mining Sector, Harare, February 1993: pp. 1-3.

Laurence D. C., A Review of the Small/Medium Scale Mining Sector. Unpublished, March 1994: pp. 3-20.

Legge C., Small-scale Mining-Making it Work. Appropriate Technology, September 1990: pp. 10-14.

Levin G., and Handley J., Mineral Rights in Southern Africa:A Historical Review. Kaplan and Stewart Inc., November 1993: pp. 3-19.

Makoni S., Don't Blame Whites for Economic Ills. Financial Mail, August 21 1996: pp. 17.

McAllister M. L., Mineral Policy Update 1985-89. Centre for Resource Studies, Queen's University, Canada, 1992.

Minerals Bureau of South Africa. South Africa's Mineral Industry. Johannesburg, 1993,. 1994,1995,1996.

Minerals Commission. Regulation of Small Scale Gold and Diamond Mining in Ghana, McKay and Schnellmann Ltd., London, 1987.

Mining Magazine, The New Mining Policy: Attracting Greater Foreign is Just One of the Goals in Revising RSA's Policy. Mining Magazine, June 1996: pp. 11-13.

Mireku-Gyimah D., Opare-Baidoo S., and Cobblah A., Small-scale Mining, and Its Impact on the Economy of Ghana. The South African Institute of Mining and Metallurgy, 1996 : pp. 13-16.

Mutume G., Small Enterprises Seen as High Road to Prosperity for Have-nots. Saturday Star, August 3 1996 : pp. 9.

Nyamekye E. A., Regularisation of Small-scale Gold and Diamond Mining in Ghana. Minerals Commission, Ghana, 1995.

Otto J. M., The International Competition for Mineral Investment: Implications for Africa. University of Dundee, Scotland, 1994: pp. 2-10.

Paul R. L., Guest R. N., and Nel P., Small mines/General interest, The Mintek Small Mine Case Study. The Journal of The South African Institute of Mining and Metallurgy, January/February 1997 : pp 4-5.

Philip K., Downscaling of an Industry. Mineral Policy Workshop, Pretoria, 1996 pp AI-62.

Prince M. J., Federal Policy and Role of Public Enterprise in the Mining Sector. Centre for Resource Studies, Queen's University, Canada, 1984 pp 14-15.

Reeves J., Sky is the Limit for Rainbow Business. Saturday Star, August 3, 1996: pp 10.

Republic of Angola. Law on Geological and Mining Activities, "Mining Law". Angola, 1992.

Robb R. J., Opportunities for Small-scale Mining in South Africa: A Geological Perspective, Department of Geology. University of the Witwatersrand, 1994 : pp1-6.

Robinson I., Changes to Mineral Rights Involves Risks. Mining Weekly, October 13 ,1996: pp. 5.

Robinson I., Small Mining Sector Needs a Louder Voice. Mining Weekly, September 15 1995: pp. 5.

Robinson I., Equal Access to Resources for All. Mining Weekly June 9 1996: pp. 5.

Ruffini A., Mining Policy Debate to Review Rights. Mining Weekly, October 13 1995: pp. 9.

Segal N., Small Mining Ventures "No Panacea for Job Creation". Mining Mirror, July 1994: pp. 44.

Segal N., Chamber, ANC and MEPC plan probe into small-scale mining. Mining Mirror, June 1994: pp. 23.

Segal N., Post-Election Mineral Policy: The Case Against Radical Surgery. Optima, April 1994: pp. 25-27.

Silberberg H., and Schoeman J., The law of Property. Butterworth Publishers (Pty) Ltd, Durban,1997: pp. 1-9.

Solomon M., The Critical Strategic Issues Facing the South African Mining Industry, Mining Research and Technology Conference, March 1995: pp.3-14.

Spriggs M., Institutional Market Perspectives. International Gold Mining Newsletter, May 1996: pp.14.

Stear W. M., Measures to Encourage Small and Medium Sized Mining Concerns

and the Impact on the Mining Industry. Unpublished: pp. 2-3.

Stear W. M., The Role of Junior Mining Companies in the Future of Southern Africa's Minerals Industry. Mining Symposium, Johannesburg, 1994 : pp 4-6.

Still R. G., The Interrelationship Between Juniors, majors and the State in the Exploration of Mineral Resources in Africa. JCI, Unpublished,1996: pp. 1-17.

Van Below M. A., Nationalisation of the Mines: An Equitable Alternative. The South African Journal Of Economics, 58,3, 1990: pp.304-315 .

Van Rensburg W. C., The Economics of the World's Mineral Industries. McGraw-Hill Book Company, Johannesburg, 1978: pp. 165-170, 192-219, 260-280.

Van Rooyen Mineral Rights and Small-scale Mining - The View from Gold Field. Unpublished, 1993 : pp. 1-10.

Viljoen H. P., and Bosman H. P., A Guide to Mining Rights. Lex Patria Publishers, Johannesburg, 1979.

Viljoen M., Geology and Mineralogy Present Problems for Small-scale Mining. Mining Mirror, June 1994: pp. 43.

Viljoen M., An Assessment of South African Geological Terrains with Economical, Small-scale Mining Potential. Report to the Chamber of Mines, January 1994: pp 1-17.

Vorster H., Government's RDP Rapidly Gaining Momentum. Mining Mirror, July 1994: pp. 6.

Vorster H., Mining and the New Africa. Mining Mirror, September 1994: pp. 5.

Vorster H., Geldenhuys Says Mining Industry Seeks Alliance with Government. Mining Mirror, January 1995: pp. 14-15.

Vorster H., "No pressing need to change mineral rights system...but it could be improved". Mining Mirror, September 1994: pp. 16-19.

Vorster H., Nationalisation or Privatisation. Mining Mirror, May 1990: pp. 3.

Vorster H., Gold Mines Seen as A Major Source of Water Pollution. Mining Mirror, January 1993: pp. 49.

Vorster H., Mineral Rights as A Real Right Cannot Be Arbitrarily Alienated. Mining Mirror, February 1994: pp. 3.

Wadula P., Anglovaal to Sell to Small Groups. Business Day, August 3 1996.

Weiseenberg R., Development of SSM. Minerals and Mining Policy Workshop, Pretoria, 1996: pp. A91-A104.

Wojciechowski M. J., Mineral Policy Update 1981, 1982 and 1983. Centre for Resource Studies, Queen's University, Canada, 1982: pp.1-50.

World Bank, Strategy for African Mining, "World Bank Report Underscores Potential, Pinpoints ; oblems, and Proposes Agenda". Engineering and Mining Journal, October 1992: pp. 39-42.

Yudelman D., Canadian Mineral Policy Formulation: A Case Study of the Adversarial Process. Centre for Resource Studies, Queen University, Canada, 1984: pp.10-42.

Government Gazette, Minerals (Prospecting and Mining) Act, 1992. Government Gazette of the Republic of Namibia. Windhoek, 1992.

Government Printers, Zimbabwe Mining Code. Government Printers, Harare,1980.

APPENDIX I

A Summary of Mineral Right Development in Southern Africa

1462 The Court of Holland directs that Roman Law be applied in certain respects resulting in Roman-Dutch law.

1813 The Cradock Proclamation restricts mines of precious metal and stone as the property of the crown in the Cape Colony.

1871 The Zuid Afrikanse Republic (ZAR) Gold Act 1 reserves the right of mining for all precious metals and stones to the state.

1881 ZAR Resolution permits the separation of land and mineral rights.

1883 Adolf Luderitz acquires Angra Pequena and hinterland.

1885 Adolf Luderitz sold his mineral rights to Deutche Kolonial Gesellschaft fuer Suedwest Africa (DKG) which included all mineral rights.

1888 DKG granted further mineral rights and opened its own Mines Department.

1889 DKG collapsed and all its rights were taken over by the German Reich who assumed government of the area. All mineral rights were thus vested in the state.

1889 The British South African Company (BSA Company) was formed with rights to all minerals north of the Limpopo river.

1891 The BSA Company's charter extended north of Zambezi river to North East and North West Rhodesia with all mineral rights.

1891 British Central African Protectorate (Nyasaland) declared. BSA Company obtains right to all minerals.

1894 Vast concessions granted for mineral rights in South West Africa.

1905 BSA Company granted mineral rights of Tuli, Lobatsi and Gaberone blocks.

1933 Southern Rhodesia purchases all mineral rights from the BSA Company.

1956 All mineral rights of BSA Company transferred to Northern Rhodesia.

1963 All rights to minerals in the Crown Lands vested in the Ngwenyama in trust for the Swazi nation.

APPENDIX II

II Historical Evolution of Mineral Rights in Southern Africa

Levin and Handley (1993) in their discussion on mineral rights evolution of Southern Africa outlined the past and current mineral rights systems in nine Southern African countries, i.e. Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe.

1 Angola

All minerals, including oil and gas, on land and extending to the continental shelf, are vested in the state. Prospecting and mining is subject to negotiation with authorities and fees and time limits apply to all contracts.

2 Botswana

In 1890 Bechuanaland was used as a springboard for the colonisation of central Africa. Rhodes's pioneer column mustered in the Protectorate prior to their final advance to Salisbury. In 1904 the Tuli, Gaberone and Lobatsi blocks ceded by Chiefs for a railway, were declared to be Crown land and in 1905 were finally granted to the British South African Company (BSA Company).

Mineral rights on these blocks, i.e. the Railway Strip via Lobatsi, Gaberone and Tuli are held by the State. Other mineral rights arranged with Chiefs include the Ghanzi Block, Molopo Farms and others all of which have reverted to the state. Mineral rights in the Tribal Territories were regarded as the property of the Chief though since 1972 all rights have been appropriated by the Central Government. All mineral rights in Botswana are vested in the state.

3 Malawi

In 1891 Britain declared a formal protectorate over the country which was called British Central African Protectorate. Johnston, the commissioner to the Protectorate co-operated with Rhodes to administer what was later to become North Eastern Rhodesia on behalf of the BSA Company, the company which initially held all mineral rights. According to Levin and Handley (1993) these mineral rights appear to have been relinquished over the years without any compensation being paid out.

The ownership of all mines, minerals, mineral oil or natural gas, other than any interest in earth, sand, granite, marble, stone, limestone or other similar substance, ownership or other disposition upon or under the land or water of Malawi is in perpetuity in the President on behalf of the people of Malawi.

4 Mozambique

Like Angola mineral rights are vested in the state. Application to prospect or mine is directed to the relevant authority.

5 Namibia

For most of the 19th century Namibia (South West Africa prior to in[illegible] was under the rule of independent tribes. As far back as 1868 German mis[illegible] to interest Germany in the territory. In May 1883 Adolf Luderitz entered i[illegible] with Joseph Fredricks of the Bethanians to acquire the whole coastline [illegible] Pequena to the Orange river, to a width of 20 geographic miles (equivalent to 148.27 km) was latter effected.

In 1884 Luderitz and his acquisition were placed under the protection of the Reich. By the end of 1885 Luderitz had sold his rights to the Deutche Kolonial Gesellschaft fuer Suedwest Africa (DKG). These rights included mineral rights. After acquiring a great deal of mineral rights through treaties with various tribes the DKG in 1888 formed its own Department of Mines which was officially recognised by the Reich Government who granted the company sole prospecting rights throughout the territory to precious metals and precious stones. Upon the collapse of the DKG in 1889 the German Reich took over the running of the country resulting in all mineral rights being vested in the state.

In 1990 Namibia gained its independence. No changes on ownership of mineral rights has taken place and none has been incorporated in the Minerals Act 33 of 1992.

6 Zambia

In 1924 Northern Rhodesia became an Imperial Protectorate administered by a governor appointed from London and responsible for the Colonial Office. The BSA Company held the mineral rights and Anglo American and Rhodesian Selection Trust were given grants for extended exploration programmes to assess the mineral potential of Northern Rhodesia. This resulted in the discovery of a large rich Copper Belt.

Upon attaining independence in 1963 all mineral rights reverted to the state. Mines, however, could have an element of private ownership in them subject to negotiation with the state. Today Zambia is in the process of re-inventing the private companies to buy some of the mines in which the Government is the majority shareholder.

7 Zimbabwe

In 1890 the BSA Company occupied Southern Rhodesia. Mineral rights were vested in the BSA Company until 1933 when they were bought by the Southern Rhodesian Government for two million pounds sterling. Since that time all title to land in Zimbabwe has been and still is held subject to reservation of the mineral rights in favour of the state.

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