DSPACE

https://dspace.org/

Regulatory factors undermining the competitiveness of mineral prospecting activities: a case study of South Africa

Khubana, Leada

2022
https://hdl.handle.net/10539/34961

Downloaded from a DSpace repository. https://dspace.org/

School of Mining Engineering



UNIVERSITY OF THE
WITWATERSRAND,
JOHANNESBURG

REGULATORY FACTORS UNDERMINING THE COMPETITIVENESS OF MINERAL PROSPECTING ACTIVITIES: A CASE STUDY OF SOUTH AFRICA.

Leada Khubana

A research report/~~thesis/dissertation~~ submitted to the Faculty of Engineering and the Built Environment, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Science in Engineering.

Johannesburg, 2022

DECLARATION

I declare that this report is my own, unaided work. I have read the University Policy on Plagiarism and hereby confirm that no plagiarism exists in this report. I also confirm that there is no copying nor is there any copyright infringement. I willingly submit to any investigation in this regard by the School of Mining Engineering and I undertake to abide by the decision of any such investigation.



16/09/2022

Signature of Candidate Date

ACKNOWLEDGEMENT

Firstly, I would like to thank God for giving me the strength to continue the research until completion. Through difficult times encountered, my strength was constantly renewed. I would not have done it without the help from above.

I want to send my warmest appreciation and thanks to my supervisor Dr. Paseka Leeuw who made this research possible through his guidance and advice throughout all the stages of the research project.

I would also like to thank my family for the encouragement and prayers, my husband for supporting me, and being understanding while I was going through a busy schedule. Finally, I thank the contribution and support from my friend Mbofholowo Emmanuel Mavhungu and a colleague Mashudu Nelwamondo who have guided and assisted me with my studies.

TABLE OF CONTENT

DECLARATION i

1 INTRODUCTION 1

1.1 Background 1

1.3 Problem Statement 5

1.4 Research Objectives 6

1.5 Research Outline 7

2 LITERATURE REVIEW 9

2.1 Overview of chapter 2 9

2.2 General Factors Affecting Mineral Sector Competitiveness 10

2.3 Measuring Mining Industry Competitiveness 13

2.4 Minerals and Mining Policy 15

2.5 Implementation of Minerals and Mining Policy 18

2.6 Mining Laws as Policy Instruments Related to Exploration in Selected African Countries 21

2.6.1 South Africa 21

2.6.2 Botswana 22

2.6.3 Namibia 24

2.6.4 Burkina Faso 26

2.6.5 Zimbabwe 26

2.7 Chapter Summary 27

3 RESEARCH METHODOLOGY 30

3.1 Overview of Chapter 3 30

3.2.1 Qualitative method 31

3.2.2 Quantitative method 36

Selection of participant 37

Favorable risk/benefit ratio 38

Professional integrity 38

3.7 Chapter Summary 41

4 PRESENTATION AND DISCUSSION OF COMPANIES' ANNUAL REPORTS 42

4.1 Overview of Chapter 4 42

4.2 Presentation of Exploration Expenditures 43

4.2.1 African Exploration Mining and Finance Corporation SOC Ltd 44

4.2.2 Northam Platinum Limited 45

4.2.3 Pan African Resources Limited 46

4.2.4 Bauba Resources Limited 47

4.2.5 Mineral Commodities Limited 48

4.2.6 MC Mining Limited 49

4.2.7 Randgold and Exploration Company Limited 50

4.2.8 Transhex Group Limited 51

4.2.9 Bushveld Minerals Limited 52

4.2.10 Universal Coal Plc 53

4.2.11 Wesizwe Platinum Limited 54

4.2.12 Magnum Mining and Exploration Limited 54

4.3 Analysis of the Total Prospecting Expenditure of Sampled Companies 55

4.4 Chapter Summary 58

5 PRESENTATION AND DISCUSSION OF COURT CASES 59

5.1 Overview of Chapter 5 59

5.3 Case Studies of Court Cases 61

5.3.1 Court case: 869/2006 62

Background of the case 869/2006 63

Court finding 64

5.3.2 Court case: CCT 08/18 65

Background of the case CCT 08/18 65

Court finding 69

5.3.3 Court case: A324/2016 70

Background of the case A324/2016 71

Court finding 73

5.3.4 Court case: 14612/2013 73

Background of the case 14612/2013 74

Court finding 75

5.3.5 Court case: CCT 39/10 76

Background of the case CCT 39/10 77

Court finding 80

5.3.6 Court Case: 38258/2012 81

Background of the case 38258/2012 82

Court finding 83

5.3.7 Court Case: 20069/14 84

Background of the case 20069/14 84

Court finding 88

5.4 Discussion 88

5.5 Lesson Learned 93

5.6 Chapter Summary 97

6 PRESENTATION AND DISCUSSION OF DATA COLLECTED FROM A SURVEY 99

6.1 Overview of Chapter 6 99

6.3 Discussion of Responses 105

6.4 Government's Intervention to Resuscitate the Exploration Activities 109

6.5 Chapter Summary 112

7 CONCLUSION AND RECOMMENDATIONS 114

7.1 Overview of Chapter 7 114

7.2 Research Conclusions 114

7.3 Recommendations 117

7.4 Recommendations for Future Research 118

REFERENCE LIST 119

APPENDIX A 142

LIST OF FIGURES

Figure 1: South Africa's share of African exploration budget starting from the year 2000 to 2017. 5

Figure 2: Summary of the methods implemented. 40

Figure 3: Combined prospecting expenditure incurred in South Africa by the 12 sampled companies listed on the JSE. 56

Figure 4 : The total annual expenditure incurred by all 12 companies. 57

Figure 5: Factors affecting investors during acquisition or after being granted prospecting right in SA. 105

LIST OF TABLES

Table 1: Investment attractiveness index for African countries in 2018 15

Table 2: AEMFC's expenditure on prospecting activities from 2015 to 2019 in South Africa. 44

Table 3: Northam’s expenditure on prospecting activities from 2015 to 2019 in South Africa. 45

Table 4: Pan African's expenditure on prospecting activities from 2015 to 2019 in South Africa 46

Table 5: MRC’s expenditure on prospecting activities from 2015 to 2019 in South Africa. 49

Table 6: MC Mining's expenditure on prospecting activities from 2015 to 2019 in South Africa. 50

Table 7: Randgold’s expenditure on prospecting activities from 2015 to 2019 in South Africa. 51

Table 8: Transhex’s expenditure on prospecting activities from 2015 to 2019 in South Africa. 52

Table 9: Bushveld's expenditure on prospecting activities from 2015 to 2019 in South Africa 53

Table 10: Universal Coal's expenditure on prospecting activities from 2015 to 2019 in South Africa 53

Table 11: Magnum's expenditure on prospecting activities from 2015 to 2019 in South Africa 55

Table 12: Factors resulting in conflict and judgement outcome 89

Table 13: Summary of inhibiting factors based on seven case studies and related sections of the MPRDA 92

Table 14: Summary of Survey Results 101

Table 15: DMRE's identified factors affecting investment in exploration and intervention measures 110

LIST OF ABBREVIATIONS

Abbreviation	Meaning
AEMFC	African Exploration Mining and Finance Corporation SOC
AIM	Alternative Investment Market
ASX	Australian Stock Exchange
BEE	Black Economic Empowerment
BEE	Black Economic Empowerment Committee
DME	Department of Mineral Energy
DMR	Department of Mineral Resources
DMRE	Department of Mineral Resources and Energy
EA	Environmental Authorisation
EIA	Environmental Impact Assessment
EMP	Environmental Management Programme
FDI	Foreign Direct Investment
IANRA	International Alliance on Natural Resources in Africa
JSE	Johannesburg Stock Exchange Ltd
LUPO	Land Use Planning Ordinance
MIGDETT	Mining Industry Growth and Development and Employment Task
MPRDA	Mineral and Petroleum Resource Development Act

MRC	Mineral Commodities Limited
NEMA	National Environmental Management Act
PAJA	Promotion of Administrative Justice Act
PGM	Platinum Group Metals
PWP	Prospecting Work Programme
REMDEC	Regional Mining Development and Environmental
RSA	Republic of South Africa
SA	South Africa
SAMRAD	African Mineral Resources Administration System
TSX	Toronto Stock Exchange
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
VRFB	Vanadium Redox Batteries
ZAR	South African Rand

1 INTRODUCTION

1.1 Background

South Africa is highly endowed with Mineral Resources, with its non-energy resource worth approximately US$2.4 trillion and this made South Africa the wealthiest mining jurisdiction in 2017 (Department of Mineral Resources, 2017). Furthermore, in 2017 the country extracted approximately 53 different minerals and accounted for roughly 96% of global platinum group metals (PGM) reserves, 74% of chrome, 32% of manganese, 26% of vanadium, and 11% of gold reserves (Department of Mineral Resources, 2017). This positioned South Africa to compete with a country such as Australia, which in 2017 “was the second-largest producer of gold, lead, rare earth minerals, and diamonds, the third-largest producer of ilmenite, uranium, and zinc, the fourth-largest producer of antimony, black coal, and manganese ore and the fifth producer of brown coal, cobalt, copper, nickel and zircon” (Geoscience Australia, 2017: p. 17).

Even with an immense amount of Mineral Resources, the report released by the Minerals Council South Africa (2017) reported that the global exploration expenditure was R111, 7 billion in 2017. Globally, Latin America attracted about 30% of the R111, 7 billion exploration expenditures (Standard and Poor Global Market Intelligence, 2019). African continent only attracted 14% investment. In the African continent, the top four countries that attracted most of the investment comprised of Democratic Republic of Congo, Burkina Faso, Tanzania and South Africa. Although South Africa formed part of the top four countries that received more of the 14% share in the African continent. It has been

recording a decline in the African share of exploration budget from 35% in 2004 to 8.3% in 2017 compared to other African countries.

The decline was attributed to, amongst other factors, policy uncertainties and regulatory issues (Mineral Council South Africa, 2017). Also, the survey for investment attractiveness undertaken by Frazer Institute ranked South Africa at number 74 out of 122 countries surveyed in 2014, 66 out of 109 countries surveyed in 2015, 74 out of 104 countries surveyed in 2016, 48 out of 91 countries surveyed in 2017 and 43 out of 83 countries surveyed in 2018 (Frazer Institute, 2019). This could be an indication that investors might have lost interest in investing capital in South African exploration.

Tilton (1992) stated that competitiveness in exploration is based on the cost-effectiveness of finding new reserves in one country compared to another country. Studies and reports have shown that investment in exploration is determined by the geological factors and the regulatory environment of one country compared to another (Mineral Council South Africa, 2017; Frazer Institute, 2018; Jara, 2017; United Nations Conference on Trade and Development, 2011a). Due to this reason, many countries tend to focus on enhancing policy and regulatory environment as a way of attracting foreign direct investment (FDI). The reason behind countries' reliance on FDI is both technical and financial constraints that the countries experience when trying to embark on exploration (United Nations Conference on Trade and Development, 2011a; Malikane & Chitambara, 2018).

The reliance of under-developed and developing countries on FDI led these countries to establish mineral policies to attract investments (Jara, 2017). As with other countries, in 1998, South Africa developed its mineral policy aimed at addressing injustices of the past but also orientated towards changing the investors' perspective about the South African mining industry. Furthermore, it was developed to encourage investment and increase the competitiveness of the mining sector (Department of Mineral and Energy, 1998).

Exploration is one of the key nodes of the mining value chain. Without ongoing exploration, the available Mineral Reserves will decline over time and thus lower the competitiveness of the domestic mining industry. This research is informed by the work of the United Nations Conference on Trade and Development (2011a), which indicated that regulatory factors are essential determinants when investors make decision to invest in exploration and mining. The study done by Mining Industry Growth and Development and Employment Task Team (MIGDETT) showed that the South African mineral sector's competitiveness is affected by challenges arising from the regulatory framework, amongst other issues (Rossouw & Baxter, 2011). Hence, there is a need to determine regulatory factors affecting investment in the South African mineral exploration.

In South Africa, prospecting rights are acquired under the Mineral and Petroleum Resources Development Act 28 of 2002 (MPRDA) administered by the Department of Mineral Resources & Energy (DMRE). The MPRDA makes a clear distinction between exploration and prospecting. In South Africa, prospecting refers to searching for minerals excluding petroleum whereas exploration refers to searching for petroleum resources

such as oil and combustible gas. However, other countries such as Canada and Australia refer to exploration as searching for minerals (Global Legal Group, 2019). Hence, prospecting and exploration terms are used interchangeably in this research study and refers to searching for minerals.

1.2 Research Motivation

Understanding the regulatory factors affecting the investment in the South African mineral sector together with the risks of decline in investment is essential. This is because the South African government has been convincing investors to consider South Africa as an investment destination (Presidency of South Africa, 2019). Therefore, for investors to have confidence in the South African mineral sector, regulatory factors affecting investment in the sector must be identified and addressed.

The focus in this research study is drawn towards the exploration phase of the mining value chain as it is the foundation of the succeeding stages of the value chain. For South Africa to achieve the objective of its mineral policy, pertinent regulatory factors that affect the implementation of the mineral policy must be investigated. It is envisaged that the research findings will help to streamline South African mineral policy and administration, while also helping investors to understand the requirements and objectives of prospecting regulations and associated legislations better.

1.3 Problem Statement

Department of Mineral Resources (2017) indicated that several studies conducted pointed out that South Africa had an estimated US$2.4 trillion worth of in-situ non-energy minerals, which give the country a comparative advantage. However, the country's share of the African exploration budget has been declining over the years (Mineral Council South Africa, 2018). Figure 1 demonstrates the decline of the South African share of the exploration budget over time.

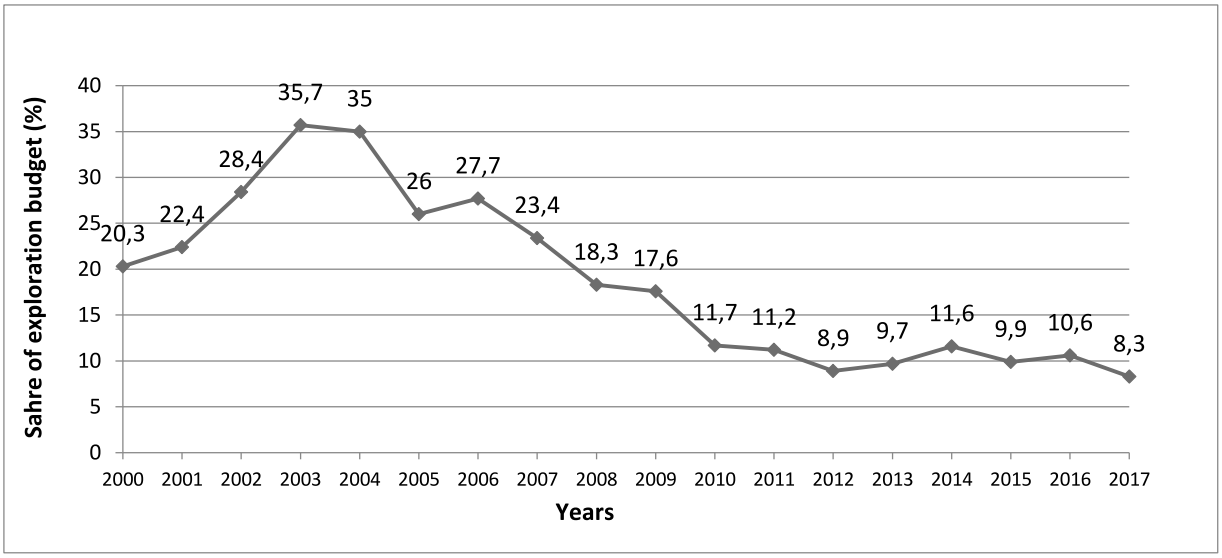

Figure 1: South Africa's share of African exploration budget starting from the year 2000 to 2017 (Mineral Council South Africa, 2018).

The view held in this research study is that should the investment in prospecting activities in South Africa continue to decline as shown in Figure 1, there will come a time when current mineable reserves will commence to decline and the mineral sector shrinking. The effect of reserves depletion results in a shortage of future mineral supply, which affects the prices of commodities (Tilton *et al*., 2018).

Considering that one of the objectives of the Minerals and Mining Policy of South Africa is to encourage investment in mining according to the Department of Mineral and Energy (1998) and relating it to the current state of investment in prospecting activities, it is vital to map the trend of investment in prospecting activities. Therefore, this research sought to identify regulatory factors that affect investment in South African prospecting activities or contribute to the decline of prospecting activities and investment over the years.

1.4 Research Objectives

Research objectives illustrate the goal that needs to be achieved. "Research objectives begin in the infinitive, and they pretend to achieve gold in mind" (De Trigueros, 2018: p. 1). Research objectives can be divided into four levels depending on the availability of information and whether the topic has been studied before. The levels are described as follows (De Trigueros, 2018):

- **Perceptual level:** the study of the phenomenon manifesting, and that is evident. This is where a researcher just explores and describes the events as they unfold.
- **Apprehensive level:** the researcher relates and re-interpret characteristics of what is being observed.
- **Comprehensive level:** The researcher perceives the characteristics, discovers a new phenomenon, connects the characteristics, and develops possible solutions. This is ordinarily applicable where the topic has extensively been studied.

- **Integrative level:** this is also applicable where the research is conducted on an area previously research. A researcher may have to propose the solution to the problems and validate the solutions.

  As the subject of this research has not been widely researched, and the purpose is to study the situation occurring, the objectives are classified under the apprehensive level. This research aims to identify the regulatory factors affecting investors' investment decisions in South African mineral prospecting. It also seeks to investigate the success of the Minerals and Mining Policy White Paper of 1998, focusing on the promotion of mineral investment. Therefore, the objectives of this research are:

- To establish the trend of investment in the prospection activities with a focus on South Africa.
- To identify regulatory hindrances affecting prospecting investment in the South African mineral sector.

1.5 Research Outline

This report consists of seven chapters, with Chapter 1 focusing on introduction, research motivation, problem statement, research objectives and questions as well as outlining research methodology. Chapter 2 explores various literature available related to the study. The chapter also discusses the key concepts such as background on policy, the

objectives of South African policy, the implementation of policy, competitiveness of the mining industry, and measure of competitiveness and mining value chain.

Chapter 3 focuses on research methodology and justification for the methods and data analysis strategy used in the study. Chapter 4 presents and discussed the data collected from companies' annual reports through qualitative document analysis. Chapter 5 presents and discusses the data collected from the review of court cases. Chapter 6 presents and discusses the data collected from the survey questionnaire. Lastly, Chapter 7 summarises and provides a general conclusion to the study. It gave a synthesis of the research and highlights how key questions have been addressed and further provides recommendations for future research.

2 LITERATURE REVIEW

2.1 Overview of chapter 2

This chapter explores published literature relating to the purpose of this research. The aim is to show how the various Minerals and Mining Policy concepts are valuable and appropriate in identifying the regulatory factors affecting the competitiveness of mining exploration. Countries that compete for investors' attraction have developed mineral policies with specific objectives depending on each country's vision. Furthermore, the implementation of Mineral Policy and competitiveness of the mining sector exploration investment are discussed.

As indicated by Bakan & Dogan (2012) and Lupu (2013), globalisation have led countries that are wealthy in Mineral Resources to compete for investment in development and extraction of those resources, therefore, general literature around the competitiveness is presented in this research study. As Minerals and Mining Policy is implemented through the laws and regulations, it was also essential to study the literature on the mining laws affecting exploration amongst the African countries. As the main objective of the study is to understand the regulatory factors that hinders investment in the South African prospecting activities, the implications of inadequate exploration investment on the mining value chain also form part of the discussion. The ensuing section deals with factors affecting the competiyiveness.

2.2 General Factors Affecting Mineral Sector Competitiveness

A country's competitiveness is described as "a set of institutions, policies and factors that determine the country's level of productivity" (World Economic Forum, 2011: p. 4). The output then determines the level of success of that country. The more prosperous the country, the higher the return on investment, increasing the growth rate and competitiveness.

Mineral resource competitiveness in the mineral sector occurs when countries endowed with minerals compete for foreign investment to create and exploit their Mineral Resources. Countries such as Canada and Australia have been enjoying a high level of foreign investment in exploration as the results of successful implementation and promotion of mining policies (Jara *et a*l., 2008 and Jara, 2017). For example, Canada, for example, has divided responsibilities amongst federal and provincial governments in managing aspects such as taxation and the environment. These assisted in developing more stable policies and good governance, thus boosting investor confidence, especially when there was a problem of duplication of Environmental Impact Assessments (EIA) resulting in delays.

Another strategy that Canada uses to promote investment is to make geological information available to investors. An exploration license is issued to a company without charging prospecting fees. Instead of obtaining an exploration license, the government requires the license holder to spend a minimum amount of money from the projected capital expenditure on exploration each year. The figures vary as they are dependent on

the projected capital expenditure. The exploration results are kept private for a certain period, and when such period lapses, the results are made available to other investors (United Nations Conference on Trade and Development, 2011a).

As a way of increasing investor's confidence, the Canadian Federal government has also developed a unique tax regime of flow-through shares. It is a tax holiday vehicle that allows exploration companies without income to transmit their exploration expenses to offset the tax obligation of their parent company. It also allows exploration expenses to be accumulated and carried forward to offset their tax obligation when the mine goes into production (United Nations Conference on Trade and Development , 2011a).

According to Jara (2017), several studies have shown that the most crucial exploration investment factors are geological potential and investment climate. In addition, variables constituting the investment climate are (Jara, 2017):

- Ensuring availability of enough infrastructure;
- Accessibility to human and intellectual capital;
- Social and political stability;
- Reliability of the responsible institutions; and
- Good tax regime and specific regulations administered in the mining sector.

Several countries such as Canada,Chile, China, South Africa and many others have realised that, where the geological factor is not an obstacle, the investment climate

through friendly mineral policies and regulations needs improvement. Regulatory uncertainty significantly affects the investment attractiveness of the mining sector. A survey done by the Frazer Institute in 2013, assessing the effects of regulatory uncertainty of Canada's British Columbia, identified barriers that have effects on exploration investment. The identified factors include uncertainty concerning disputed land claims, uncertainties surrounding environmental regulation, uncertainties over protected areas, and regulatory duplication (Frazer Institute, 2013).

In China, before 1998, significant capital invested in exploration was from the government with only a small proportion of investment coming from the banks. Post-1998, after the introduction of the new reform, investment in exploration became a market-orientated financing system. This is the system where enterprises themselves raise funds required for exploration and/or production. Depending on the risky nature of exploration, production enterprises find it easier to obtain funding than exploration enterprises (Wang, 2012).

Most underdeveloped or developing countries rich in Mineral Resources have a growing desire to develop their Mineral Resources. However, they have to compete for FDI due to lack of capital for exploration and extraction of resources. South Africa forms part of countries that developed policies aimed at attracting investment to improve the competitiveness of the South African mineral sector. The competitiveness of the mineral sector in South Africa was recognised in the white paper of the Minerals and Mining policy of South Africa published in 1998 (Department of Mineral and Energy, 1998).

2.3 Measuring Mining Industry Competitiveness

Globalisation, international trade relations, relaxation of trade barriers between countries, and competitive policies amongst countries make it difficult for countries or companies (at the firm level) to compete. This is because companies or governments continue to conduct self-assessment to be relevant to the changing world. Porter's diamond model was developed to estimate the level of prosperity (Bakan & Dogan, 2012).

The model is dynamic and versatile; it makes it possible to determine the competitiveness position of the industry together with the identification of variables that affect competitiveness. Some of the variables that affect the industry's competitiveness are "factor conditions, demand conditions, related and supporting industries, firms' strategy, structure and rivalry" (Bakan and Dogan, 2012: p. 441). In addition to these identified variables, the government has been identified as a significant variable required to complete Porter's diamond model. This is because, through policies and legislation, the government can affect the variables mentioned above. Furthermore, depending on their implementation, the government's policies and legislation can "benefit or adversely influence the competency of a country and an industry" (Bakan and Dogan, 2012: p. 446).

Jara (2008) found that using variables such as a share of total world expenditure in exploration to measure mineral sector competitiveness can be misleading. Other variables such as government revenues, mineral production, and investment in new projects can also be lagging due to the time it takes for their effects to be exposed. As a result, grassroots exploration investment is considered the most reliable variable in

measuring competitiveness. Jinghuaa *et al*. (2011) utilised the Porter's model to determine the competitiveness of the mining industry of xinjiang Province in China, thus developing what is called the mining industry Competitiveness Evaluation Index System of Xinjiang. The system identified four main issues of focus namely; natural resources, mining productivity, minerals and mining policy, and the related industries.

The Frazer Institute (2018) produced an investment attractiveness index which is mainly derived from the "Policy Perception Index and results from best practices mineral potential index" (The Frazer Institute, 2018: p. 8). According to the survey in 2018, Guinea ranked the highest on the African continent's investment attractiveness index, ranked 20 out of 76 countries surveyed globally. The second highest ranked country in Africa was South Africa, ranked 40 out of 76 countries while Botswana was the third highest ranked country in Africa, ranked 45 out of 76 countries. In the fourth position, it was Burkina Faso which was ranked 51 out of 76 countries. The fifth position was taken by Namibia, which was ranked 55 out of 76 countries. The sixth position was taken by Mali, which was ranked 68 out of 76 countries. Table 1 illustrate these countries and their ranks from highest to the lowest rank.

Table 1: Investment attractiveness index for African countries in 2018 (Frazer Institute, 2018).

Country	Rank (African Continent)	Rank (Globally)
Guinea	1	20 out of 76
South Africa	2	40 out of 76
Botswana	3	45 out of 76
Burkina Faso	4	51 out of 76
Namibia	5	55 out of 76
Mali	6	68 out of 76

The other African countries that participated in the investment attractiveness index were Democratic Republic of Congo (DRC), Tanzania, Zambia, and Zimbabwe (Frazer Institute, 2019). Although South Africa has the best policy, the share of exploration expenditure it attracted showed a decline trend between 2000 and 2017.

2.4 Minerals and Mining Policy

A policy, in general, is defined as "the vision, aspiration, and statement of intent or strategic plan, that provides the basis for ensuring predictable decisions and actions. The policy is significant as it provides the basis for planned work, accountability, and evaluation of progress" (Mtegha *et al.,* 2006: p. 232). Based on the policy definition, its objectives can be used to measure the success of its implementation.

Globalisation has resulted in competition for investors amongst mineral endowed countries that compete with one another (Bakan and Dogan, 2012 and Lupu, 2013). The competition for investors has led countries to develop mineral policies aimed at attracting

investments. Hence, a country such as the United Kingdom (UK), has also developed a mineral policy with an objective such as ensuring a stable and sufficient supply of minerals produced within the country, provided the minerals can support the UK's economic growth. The UK's policy objectives also focus on ensuring a steady supply of minerals without impermissible impacts on the natural environment, historic environment, or human health (Wrighton *et al*., 2014).

Canada is also another country in which mineral policy is an essential factor contributing to the maximisation of mining benefits for the country. Hence, Canada has developed exploration friendly policies to attract local and foreign investments (Frazer Institute, 2013). Another country that recognised the importance of foreign investment in the mining sector is China, most notably in exploration. In 2004, the Chinese government published its mineral policy, which was aimed at (Wang *et al*., 2012):

- Accelerating and enhancing reform to allow foreign investment into the local mining industry by improving administrative and approval system;
- Increasing production in mining and to promote the domestic commodities internationally; and
- Promoting mineral exploration through a transparent and just system of approving mineral rights.

South African Minerals and Mining Policy was passed as a White Paper in 1998 with the intent of "creating a stable macro-environment that supports economic development at the national, provincial and local level and in which business, subject to appropriate

regulation, can operate profitably, be internationally competitive and satisfy their shareholders and employees' expectations" (Department of Mineral and Energy, 1998). This is how the South African government anticipated that the policy would position the local mining sector to attract investment similar to other industries (Department of Mineral and Energy, 1998). Like other countries, the South African Minerals and Mining Policy aims to place the country's mining sector as an investment destination.

Establishing a Minerals and Mining policy or plan does not assure proper execution, as an implementation of the policy is more operational. If the policy is implemented through laws, resource allocation, responsibility allocation, and adequate timeframes, its success will be seen through contribution to the broad national economy (Tilton *et al*., 2016). There is a need to assess whether the objectives of the Minerals and Mining Policy are met, as the implementation does not guarantee success.

Samson *et al*. (2015: p. 2) indicated that "a social policy impact assessment evaluation necessary falls within the realm of activities in which acts of choice have pathways to an outcome". Therefore, to assess the policy outcomes, it is vital to consider the implementation and evaluation stages of the policy. The implementation and evaluation then inform the overall policy outcomes (Samson *et al*., 2015).

United Nations Environment Programme (2017) has identified three methods that can be applied when conducting a policy impact assessment. These methods include experimental impact assessment, quasi-experimental method, and non-experimental

method. Both the experimental and quasi-experimental methods require an experimental group and an assigned control group during data collection. The experimental impact assessment and quasi-experimental process need both the assigned control group and experimental group when implemented, it makes these methods complicated and unrealistic to apply. This leaves the most desirable approach when conducting policy impact assessment as a non-experimental method (United Nations Environment Programme, 2017).

2.5 Implementation of Minerals and Mining Policy

A beneficial mineral policy needs the application of relevant policy tools to attain the national objectives. Therefore, for the policy to be properly implemented, it must be converted into a law (Tilton and Guzman, 2016). Various countries with Mineral Resources have laws and regulations; however, these laws may not be implemented properly (International Alliance on Natural Resources in Africa, 2016).

According to United Nations Economic Commission for Africa (2014), for governments to manage the mineral sector effectively, there must be a "sound regulatory framework that is grounded in enforceable legal systems, providing for; accountability, transparency, human rights and informed administration of the sector which fully acknowledges the rights and needs of mining communities" (United Nations Economic Commission for Africa, 2014: p. 133). Although countries may have legislation guiding the minerals sectors, if they are not adequately designed or enforceable, such legislation will not be effective.

When private foreign investors choose to invest in a country, they establish a relationship with sovereign and non-sovereign entities. Once the investment is established, the investors acquire rights under that country's law. When disputes arise concerning the right and obligations of both the investor and government, and when such disputes cannot be resolved through negotiations, involved parties resort to litigation (Otto and Cordes, 2002).

In South Africa, the Promotion of Administrative Justice Act 3 of 2000 (PAJA), according to Hoexter (2018), makes it possible for any person who is not satisfied with an administrative decision to dispute that finding in a court of law (Hoexter, 2018). Hence, investors, law administrating organisation and interested and affected parties can approach the courts when conflicts arise during the administration of mining acts such as the Mineral and Petroleum Resources Development Act 28 of 2002 (International Alliance on Natural Resources in Africa, 2016).

Most countries in Africa have developed their mineral legislation motivated mainly by the country's national objectives and history. Some of these countries include Angola, Democratic Republic of Congo, Zimbabwe, Kenya, and South Africa. Angola, DRC, and Zimbabwe have the same type of legislation, which is a mining code that aims to consolidate all previous legislation applying to mining activities. Kenya is different from the other countries as the mining sector is regulated through a "Mining Bill which refers to the provisions to which it gives effect" (International Alliance on Natural Resources in Africa, 2016: p. 12).

South Africa has the MPRDA, which was enacted to regulate the mining and prospecting activities, “to ensure equitable access to and sustainable development of the nation’s mineral and petroleum resources, optimal exploitation, processing and utilisation of minerals” (Department of Mineral Resources, 2015: p. 3). The MPRDA also regulates the environmental management of land disturbed by exploration and mining. It is the central Act responsible for the entire regulatory environment of the South African mining industry, which includes regulation of rights, ownership, mineral sales, and beneficiation (Department of Mineral Resources, 2015; International Alliance on Natural Resources in Africa, 2016).

International Alliance on Natural Resources in Africa (2016) indicated that the purpose of the legislation regulating the Mineral Resources in South Africa includes a broad objective, followed by a commendable set of intensions. The MPRDA is administered by the Department of Mineral Resources & Energy (DMRE), which is the institution responsible for the design and administration of mineral policies to ensure best utilisation of the country's Mineral Resources and implementation of mineral and petroleum laws (Department of Mineral Resources, 2015). The ability of South Africa to attract investment also lies in the capability of the DMRE to administer the MPRDA effectively.

2.6 Mining Laws as Policy Instruments Related to Exploration in Selected African Countries

Many countries in the African continent continues to ease the environment of conducting business. This section looks at the regulatory frameworks governing exploration in five countries which were among the 10 African countries with the highest investment attractiveness index in the 2019 Frazer Institute survey (Fraser Institute, 2019). These countries are South Africa, Botswana, Namibia, Burkina Faso, and Zimbabwe.

2.6.1 South Africa

In South Africa, the minerals belong to all people of South Africa and the state is the custodian thereof. Prospecting rights are acquired under the MPRDA, which the DMRE administers. Besides MPRDA, several other laws affect prospecting activities in South Africa. These laws include the law of contract, where the terms and conditions relating to the prospecting activities are entered into between the Minister of DMRE and the prospecting right holder. The right holder is further required to agree with the landowner(s). The MPRDA makes a clear distinction between exploration and prospecting.

To conduct the prospecting activities, the interested person must apply for a prospecting right under MPRDA, and the application must also be lodged for Environmental Authorisation (EA) under the National Environmental Management Act No. 107 of 1998 (NEMA). The applicant must consult with interested and affected parties, owners, and lawful occupiers of the land and must provide proof that they have technical and financial

resources to carry out the proposed prospecting work. The applicant must obtain a water use license under the National Water Act No. 36 of 1998 to be able to use water. Lastly, the applicant must comply with municipal laws such as zoning required according to Land Use Planning Ordinance 15 of 1985 (LUPO) and smoke emission law. If the applicant meets all the requirements, the Minister of DMRE can grant a prospecting right for a maximum period of five years, which can further be extended for a maximum of three years. This can result in a total prospecting period of a maximum of 8 years (Global Legal Group, 2019).

Respective government bodies handle other licenses and approvals. For example, a Water Use license is issued by the Department of Water and Sanitation and zoning approval is issued by the municipality. There is no restriction when it comes to ownership of the companies or individuals applying for prospecting rights. Prospecting rights can be applied for by local (i.e., companies or individuals) or foreign companies. However, both foreign and local companies must have at least 26% of shareholders belonging to the Historically disadvantaged South African citizen (HDSA), who due to apartheid policy were disadvantaged by unfair discrimination before the constitution of South Africa, 1993 came into operation. Prospecting right can be transferred to another party but with the written consent of the Minister of DMRE (Global Legal Group, 2019).

2.6.2 Botswana

In Botswana, all minerals belong to the state, and the body responsible for issuing the license to either mine or prospect is the Ministry for Mineral, Energy, and Water

Resources. The legislation that governs Botswana mining and exploration activities is Mines and Minerals Act Cap 66:01 and the Mines, Quarries, Works, and Machinery Act Cap 44:02 (LEXAfrica, 2019). Once the applicant of a prospecting right meets all the Act's requirements, the prospecting right is issued for three years and with two options to renew the right for a maximum of two-year period. This leads to a total of seven years of the life of the prospecting project in Botswana. Should there be a discovery of deposit and the holder feels a need to conduct more studies, the extension of a prospecting period above seven years can be granted.

When the prospecting right is issued, the holder, among others, is obligated to do the following (LEXAfrica, 2019: p. 10):

- "Commence prospecting operations within three months or such further period as the Minister may allow, of the date of issue of his license.
- Carry on prospecting operations under the programme of prospecting operations as set out in the prospecting licence; and notify the Minister of the discovery of the mineral to which his prospecting licence relates within 30 days of such discovery or discovery of any mineral deposit of economic value.
- The holder of a prospecting licence shall not without the written permission of the Minister, remove any mineral from a prospecting area except to have such mineral analysed, valued or tested in Botswana".

The Minister is entitled to ensure compliance with the above obligations. The holder of a prospecting license can also inform the Minister of any intended changes to the

prospecting programme. If the Minister does not object to the proposals within 60 days, the amendments can resume. At any time three month before expiry, the holder of a prospecting permit may apply for a renewal of a license to the Minister. A report must accompany the application on prospecting activities and the expenditure incurred. Minister evaluates and then decides to either grant the renewal or refuse (LEXAfrica, 2019).

2.6.3 Namibia

In Namibia, minerals belong to the state unless otherwise lawfully owned as stipulated in Article 100 of the constitution of Namibia (LEXAfrica, 2019). Prospecting and mining activities are regulated by the Minerals Act 33 of 1992. Other acts regulating the mining industry are Mines, Works, and Minerals Ordinance 20 of 1965, Labour Act 11 of 2007, and the Environmental Impact Assessment regulations. The body responsible for administering the mining law is the Ministry of Mines and Energy, headed by the Minister of Mines and Energy. The Minister of Mines and Energy is assisted by the Mining Commissioner and the Mineral Board of Namibia. The environmental-related issues are regulated by the Minister of Environment and Tourism, with the Minister of Environment and Tourism assisted by the Environmental Commissioner (LEXAfrica, 2019).

A person may apply for either a non-exclusive prospecting license, exclusive prospecting license, or surveillance to prospect for a mineral. "Reconnaissance licence authorises the holder thereof to conduct reconnaissance operations, and it is valid for a maximum period

of six months and may not be renewed. It may, however, be extended once for six months" (LEXAfrica, 2019: p. 53).

Exclusive and non-Exclusive prospecting licence differs because a "non-Exclusive prospecting licence is valid for one year and is not renewable. It is not granted over a specific area. On the other hand, an exclusive prospecting licence is valid for three years and may be renewed twice for two years per renewal. Further renewals are possible only if the Minister deems it desirable in the interests of the development of the Mineral Resources of Namibia. Lastly, it is granted over a specific area" (LEXAfrica, 2019: p. 53).

According to the Namibia Investment Promotion Act 9 of 2016, "investor or investment in the natural resource sector or in any other industry which is above the threshold may not change the ownership or control of investment; or transfer any licence, permit, authorisation, or concession owned by the investor or investment, to a foreign investor through any form of merger, acquisition, direct sale, or transfer without the approval of the Minister" (LEXAfrica, 2019: p. 54).

Furthermore, an "investor in Namibia who wishes to change ownership or control of the investment in favour of a foreign investor; or transfer any licence, permit, authorisation, or concession owned by the investor or investment to a foreign investor through any form of merger, acquisition, direct sale, or another disposal, must, subject to the requirements of the Competition Act 2 of 2003, apply to the Minister in the prescribed form and manner for approval of such proposed change or transfer at least 60 days before the date of the

intended change or transfer or any earlier date as the Minister may allow in any particular circumstances" (LEXAfrica, 2019: p. 54).

2.6.4 Burkina Faso

The Mining Code regulates exploration and mining in Burkina Faso. The government bodies responsible for the administration of mining law are the Ministry of Mining and the courts. Exploration and research in Burkina Faso are authorised under mining titles or authorisations. Research is conducted under a research permit. "Exploitation operations are conducted under an exploitation permit, which may be industrial or semi-mechanized exploitation" (LEXAfrica, 2019: p. 17). A person can also apply for a prospecting authorisation. Burkina Faso's mining law does not require equity in exploration by indigenous people. Disposal of controlling interests in entities holding exploration is not restricted (LEXAfrica, 2019). The owners or traditional occupants of which the land which is utilised for exploration or exploitation of mineral are entitled to compensation by the companies conducting such activities on their land (LEXAfrica, 2019).

2.6.5 Zimbabwe

The main legislation governing the mining activities in Zimbabwe is the Mines and Mineral Act (Chapter 21: 05) and its regulations. The government body responsible for administering mining law is the Minister of Mines, who acts as a Mining Commissioner for the various district. The prospector can apply for a prospecting license, which gives the holder a right to prospect, peg, and register claims in terms of the Act.

There are two types of prospecting licenses that one can apply for in Zimbabwe. These comprise a standard prospecting license, “valid for two years, and the prospector's license, valid for five years and can be renewed. The other type of prospecting license is an exclusive prospecting order which provides exclusive right to prospect for specified minerals in any identified location within Zimbabwe. The exclusive prospective orders are issued for a maximum period of six years and can be renewed for a further three years" (LEXAfrica, 2019: p. 85). When it comes to equity requirement, indigenous Zimbabweans are entitled to own 51% of shares of mining company operating in Zimbabwe.

2.7 Chapter Summary

Globalisation has resulted in competition for investors amongst mineral-endowed countries that compete with one another. The competition for investors has led governments to develop mineral policies to attract investments. Implementing such laws and regulations may yield positive and negative outcomes. They may either even achieve the intended objectives or not.

The reviewed literature covered aspects of a mineral policy, implementation of mineral policy, measuring mining industry competitiveness, mining laws affecting exploration amongst some African countries, and the implications of inadequate exploration investment on the mining value chain.

In summary, it was found that the mineral policy is directly linked to the regulations and laws developed to regulate the mining industry and attract investment. The linkage is due

to the implementation of the laws that seek to achieve the ideals of national prosperity envisaged in mineral policies. However, the development of mineral policies does not guarantee proper execution, as the implementation of the policy is more operational. There is a need to assess its successful implementation.

South Africa developed the Minerals and Mining Policy, which was passed as a White Paper in 1998, with one of the objectives being to attract investment to the mining sector. Developing a mineral policy or strategy does not guarantee proper implementation, as the implementation of the policy is more operational, and the success of its implementation is seen through its contribution to the broad national economy.

For the policy to be implemented appropriately, it must be converted into a law. South Africa has MPRDA as its principal legislation that governs the acquisition of prospecting rights. The MPRDA is also supported by other acts, such as the NEMA and Land Use Planning Ordinance 15 of 1985 (LUPO). The organisation responsible for administering Prospecting Rights in South Africa is the DMRE. Therefore, as disputes arise between interested and affected parties, PAJA allows anyone aggrieved to challenge the decision in a court of law.

Although South African mineral policy is considered one of the best in Africa, the decline in the share of exploration budgets reflects that there are deficiencies with the implementation of the policy. The shortcoming may be why other African countries are beginning to attract more share of exploration budgets indicating that investors are

beginning to find other African countries attractive. Considering the importance of exploration in the mining value chain and the impacts that lack of investment in the exploration phase may pose to the mining sector's entire competitiveness. It is vital to focus on developing policies that will attract investment in the exploration phase and address factors that may affect the investor's desire to invest in exploration. In this regard, the next chapter of this report provides detailed information on the research methodology applied during data collection, analysis, and verification.

3 RESEARCH METHODOLOGY

3.1 Overview of Chapter 3

This chapter presents the methodological approach applied in this study. It identifies and justifies the research method(s), data collection method(s), data analysis technique(s), and the sampling technique employed in the study. Research questions and objectives were answered through the application of qualitative and quantitative methods.

The research applied a mixed-method study that combined qualitative and quantitative data collection methods. Bowen (2009) indicated that researchers could use qualitative document analysis combined with other quantitative methods (a process called data triangulation). The data sets can be corroborated to minimise biases during the research process. However, Bowen (2009) stresses the use of document analysis in combination with another quantitative method. For this study, qualitative document analysis combined with the survey questionnaires was considered appropriate, as data gathered through questionnaires were used to support the information collected from document analyses to reduce biases.

Document analysis can be used with other qualitative research methods to combine different methodologies for studying the same phenomenon. The use of a variety of methods is called "data triangulation" (Bowen, 2009: 28), and it is helpful for findings that can be corroborated across data sets and assist in reducing biases that can occur (Bowen, 2009). The documents analysed comprised court cases and annual reports of companies.

3.2 Methods of Data Collection and Analysis

Different methods can be applied to answer research questions. Each method requires the use of various tools for data collection and interpretation. For this study, two methods were considered appropriate for answering the research questions. The selected methods consist of qualitative and quantitative methods. Below is a detailed description of the methods applied.

3.2.1 Qualitative method

Organisational and institutional documents have been utilised for the qualitative research approach. Documents can provide context and the history surrounding the area of the study. They provide leads and available information on the phenomenon occurring, and the researcher can then use the documentary data to compare information gathered from other methods such as interviews. Recently the number of research reports and journal articles that uses document analysis as part of research methodology has been increasing (Bowen, 2009).

Qualitative research is theoretical. It is associated with analytic induction. The study begins by defining very general concepts that change the definition of their method when research progresses. The variables may constitute a product outcome (Brannen, 2005). Bowen (2009) described document analysis as part of the qualitative method. Document analysis may include analysis of documents such as "advertisements, agendas, attendance registers, minutes of the meeting, manuals, background papers, books, journals, brochures" (Bowen, 2009: 27).

The following benefits of document analysis are noteworthy as the researcher was able to realise their importance in this research:

- Information in the documents can provide hints on questions that the interview or questionnaire needs to ask;
- Information from documents can be a valuable knowledge base and can supplement other data sources;
- Documents provide valuable means of tracking changes;
- Documents can be used to verify findings or corroborate evidence from other sources; and
- Document analysis is helpful in providing history surrounding the study and supplementing the data acquired from a questionnaire.

Qualitative data collection

O' Leary (2014) provided the 8-step process that the researcher must consider before document analysis can be applied to answer the research question. The steps comprises of:

- Creation of a list of text to be explored
- Consider how the text will be assessed
- Acknowledge and address biases
- Develop appropriate skills for the research
- Ensure credibility
- Know the relevant data to focus on

- Consider ethical issues such as the credibility of documents
- Have a backup plan.

The above 8-step process was considered when mapping the investment trend in the South African exploration phase of the mining value chain. The expenditure on exploration data was gathered over a specified period. The data gathered focused on the selected publicly listed companies. Fugard and Potts (2015) described the acceptable sample size for small and medium projects as between 10 and 100 for secondary sources. Hence, for this research, the sample size selected was annual reports of 12 companies engaged in exploration within the Republic of South Africa.

The sampled companies were comprised of both mining and exploration companies because some mining companies also engage in exploration. Online-published annual reports of sampled companies were obtained from the companies websites. The amounts spent on exploration over five years, starting from the year 2015 to 2019, were extracted.

The rationale was to focus on the data covering five years after the recent mining bust from 2008/2009 to 2014/2015, as the boom period after the bust tends to positively impact investment in developing economies (World Bank Group, 2020). Therefore, a five-year window period between 2009 and 2014 after the bust was considered enough time to recover economic activities, including investment. Thus, the data was collected starting from 2015, with the cut-off year being 2019, as it was the most recent year before the world was affected by the COVID-19 pandemic, which also impacted the countries' economies.

Incidents of conflicts arising between the regulator and investors relating to the acquisition of prospecting rights, obligations of right holders, and monitoring of issued prospecting rights were analysed in court cases. The analysis was done to identify the regulatory factors hindering the investment in prospecting activities. The court cases from 2000 to 2019 were accessed online through published court cases from the Centre for Environmental Rights and the Department of Justice and have been presented and analysed in a qualitative document analysis technique in Chapter 5. The analysis of court cases made it possible to identify specific sections of acts and regulations that resulted in disputes relating to applying and granting prospecting rights.

These disputes were mapped to sections in the mining acts and regulations to identify hindrances. The legislations (MPRDA and NEMA), zoning requirements, and regulations related to the acquisition of prospecting rights were analysed and compared to identify the obstacles that may affect investors' decisions.

Qualitative analysis and presentation

Qualitative data analysis is a process of describing, classifying, and interconnecting phenomena with concepts of research. There is a need to explain the sensations through the interpretation and explanation of data precisely. Therefore, a conceptual framework must be developed, and a classification of data. Qualitative data analysis aims to describe a phenomenon in detail, comparing similarities of different cases or similarities between them (International Journal of Sales, Retailing and Marketing, 2016). Document analysis involves examination, reading, and interpretation of gathered data. The process of

analysis may combine content analysis and thematic analysis (Bowen, 2009). There are two common qualitative data analysis methods: grounded theory and content theory.

- **Grounded theory**

This data analysis method is defined as a theory derived from data that is systematically gathered and analysed through the research process. Grounded theory is concerned with developing theory out of data with the approach whereby data collection and analysis go back and forth repeatedly (International Journal of Sales, Retailing and Marketing, 2016).

- **Content analysis**

Bowen (2009) described content analysis as the process of organising the gathered information concerning the research question. It is a technique for making replicable and valid inferences from texts or other meaningful matters to the context of their use. Data analysis comprises any material, either written down or recorded (International Journal of Sales, Retailing and Marketing, 2016). The method can also be applied in combination with the quantitative approach. Therefore, this study used content analysis to analyse the companies' annual reports and court cases. The technique was helpful as analysing the yearly reports gathered data on the capital spent on prospecting activities and then made inferences based on the established trend. Same as analysis of annual reports, the method was also applicable to the analysis of court cases as the cases were analysed to conclude the factors that contributed to the decline in investment in prospecting activities.

3.2.2 Quantitative method

Brannen (2005) described the quantitative method as a technique to collect measurable data. It entails the generation of data quantitatively and defining variables and their categories. In addition, the quantitative method helps analyse data collected through a method such as a questionnaire.

During data collection, a sample can be taken and studied to determine characteristics that are later inferred to resemble the overall attributes of other variables. Qualitative research methods such as questionnaires are applicable where the research problem is identified, and the questions directed to participants require unequivocal answers. This method is associated with enumerative induction. The primary purpose is to determine how many or what kind of people, in general, have similar characteristics in the sample population (Brannen, 2005). For this research, the qualitative research method was applied through questionnaires.

Quantitative data collection method

A questionnaire is a valuable method for collecting primary quantitative data. It allows data to be collected in a standardised way for consistency during analysis. The purpose and design of a questionnaire should be directly linked to the study's objective and the overall answer to the research questions. A questionnaire is advantageous where resources are limited as it is inexpensive and less time-consuming. It also protects the identity of participants and allows them to provide honest input. A survey is also essential when corroborated with other studies with resources (Roopa & Rani, 2012).

For this research, the questionnaires employed were designed and administered guided by the ethics guidelines. Every research involving human participants must be undertaken ethically to protect the welfare of research participants. According to Wassenaar and Momette (2008), the ethics review is considered one of the several factors that promote ethical research. The authors further suggested that the ethics review process should consider how participants are selected, evaluate the risk or benefit ratio, and be conducted under professional integrity.

Selection of participant

As Wassenaar and Mamotte (2008) indicated, the population selected for the study should be relevant. As the research under discussion was mainly focused on the mining sector, the participants were:

- The investors that are interested in applying for prospecting rights in South Africa,
- The consultants that are involved in the application and compliance process, and
- The holders of prospecting rights in South Africa.

Considering that South Africa is vast, and it was impossible to contact every investor, participants were selected through random sampling. The results from the sample were then generalised to resemble the perception of the larger group of participants mentioned above in South Africa.

Favorable risk/benefit ratio

Furthermore, Wassenaar and Mamotte (2008) stressed the importance of considering the risk/benefits ratio to be endured by participants. In this research, the researcher considered all the questionnaires' risks to the participants. All necessary measures to prevent the possible risks were put in place. It was ensured that participants were protected from any form of harm that this research could have caused. For example, all participants remained anonymous to protect their identity. No pressure was given on any participant as all participants answered the questionnaire willingly. Lastly, permission was requested from the participants telephonically before sending the questionnaires to them.

Professional integrity

Professional conduct is also crucial during the ethical review (Wassenaar and Mamotte, 2008). The conduct throughout the research was professional and ethical, and there was no plagiarism or misrepresentation of the collected data. The data from the participants were presented as they are without any form of alteration.

A questionnaire was sent to selected participants such as company directors, right holders, and consultants interested in exploration. The questionnaire targeted the investors who mainly focused on investing in prospecting activities, right holders, and consultants that deal with application and compliance. The information about companies was obtained on the internet, the platform that most companies use to publish their profiles. Information on which company to look for was also requested from the DMRE.

According to Fugard and Potts (2015), the research projects are classified into small, medium, and large. For small projects, an adequate number of participants can be about 6 to 20. A focus group can have a sufficient number of about 2 to 4. Participant-generated text can have participants between 10 and 50, whereas large projects require about 400 or more participants. Fugard & Potts (2015) also indicated that studies discovered that saturation was reached after as few as six participants. However, for studies to understand common perceptions and experiences amongst individuals with homogenous interests or characteristics, 12 participants are considered acceptable (Fugard and Potts, 2015).

The ethics approval per the university requirements was applied for and approved before gathering data through questionnaires. The questionnaire consisted of four questions with sub-questions. The questions were sent via a link forwarded to the participants through email and SMS to approximately 25 participants. Only 15 responded, which was considered acceptable as this was greater than 12. The questionnaire helped verify the information gathered through court cases and a review of other documents. It also assisted in identifying different factors that could not be identified through the examination of documents.

Quantitative data analysis and presentation

Quantitative data analysis involves the collection and evaluation of quantifiable and verifiable data that has been collected from the sampled participants. Sentiment analysis was the method used for analysing the collected data. Sentiment analysis is described

as the "process of gathering and analysing people's opinions, thoughts and impressions regarding various topics, products, subjects and services" (Wankhade, et al., 2022, p. 1). Wankhade, et al., (2022) further indicate that sentiment analysis is essential for detailed investigation of several topics, giving an example of product analysis.

The survey questionnaire was sent out to participants through the esurveycreator website. The website can collect data, interpret and present output in a statistical format. For closed-ended questions, the output was presented based on the most popular answer: "Yes, No, or Do not know." The output for open-ended questions was presented in word format, and the analysis was based on assessing the common comments to the questions.

Figure 2 shows the chart summarising how the data was collected. The data was collected using three methods: the analysis of the companies' expenditures over a selected period, the court case analysis, and the administration of the questionnaire.

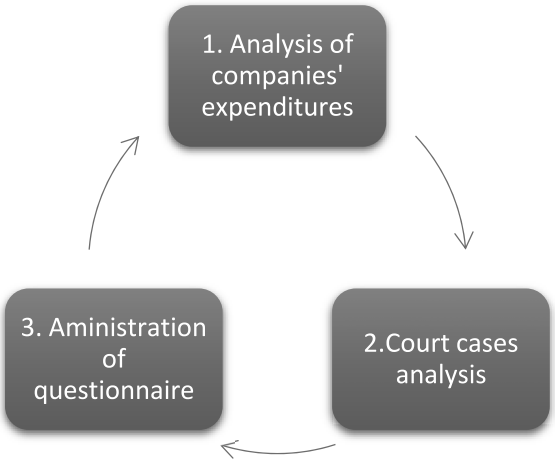

Figure 2: Summary of the methods implemented.

3.7 Chapter Summary

In this chapter, the research methodology employed in the study was presented. The research has been designed to apply a mixed methods approach, which used qualitative in the form of document analysis and quantitative through questionnaires. The chapter defined the study population and outlined the criteria and sampling techniques followed in selecting participants for the study. Methods of data collection, data analysis, and verification were described. Verification entailed comparing data gathered from document analysis with the data collected from the survey. As ethical considerations form a central position when using a questionnaire, ethical concerns considered in the study were also described. Chapter 4 presents the findings of the study and the discussion thereof.

4 PRESENTATION AND DISCUSSION OF COMPANIES' ANNUAL REPORTS

4.1 Overview of Chapter 4

This chapter aims to present and discuss the data collected from the annual reports of 12 companies included in the study under discussion. The gathered data on companies' expenditures on exploration activities in South Africa were primarily aimed to establish the investment trend in the prospecting in South Africa post the 2008/2009 to 2014/2015 mining bust. The annual reports are perceived as the most critical platform where companies disclose information relating to company's financial position, performance, and cash flow (Stainbank and Peebles, 2006). Hence, annual reports can state capital spent on exploration by the exploration and mining companies.

It is noteworthy that the information from the companies' annual reports was easily accessible from the companies' websites as the company's annual reports are regarded as public documents in South Africa. The accessibility of these public documents eliminated the difficulties associated with requesting permission to use the information from each company included in the study. There are small, medium, and large companies in South Africa involved in prospecting activities, the nature and magnitude of the research under discussion did not make it possible to cover all the prospecting companies operating in the country.

Therefore, this chapter focused on sample of publicly listed companies involved in prospecting activities in South Africa. The period under consideration was selected

avoiding the period between 2008/2009 to 2014/2015 mining bust. Kannah, Scott and Terrones (2009) indicated that the recession's impacts can last longer, and recovery can be slow and sluggish. Hence, for this research it was considered necessary to establish prospecting trend in South African post the mining bust. The period covered on the analysis of the companies' spending was 5 years between 2015 and 2019. The cut off year of 2019 was selected as it was a year before the COVID 19 pandemic caused by the outbreak of Corona virus which affected the world's economy. This was to avoid distortions caused by companies' adjustments to lockdown rules from 2020 to 2021.

As described by DRD Gold (2019, p. 34), "exploration assets comprise of costs of acquiring the prospecting right and generally consist of associated costs to convert a Mineral Resource to a Mineral Reserve. The process involves drilling, sampling, and other processes necessary to evaluate a Mineral Resource's technical feasibility and commercial viability". The section below presents the sampled publicly listed companies that engage in prospecting activities in South Africa together with their expenditures.

4.2 Presentation of Exploration Expenditures

This section presents the data collected from the selected companies' annual reports and financial statements. The data collected was mainly the expenditure incurred in prospecting activities in South Africa. In instances where the expenditure was presented in another currency other than in South African Rands, it was converted to South African rands for consistency. The expenditure collected were then combined to map the trend

of investment in prospecting activities. Below is the presentation and discussion of data collected.

4.2.1 African Exploration Mining and Finance Corporation SOC Ltd

African Exploration Mining and Finance Corporation SOC Ltd (AEMFC) focuses on developing and producing coal mines in South Africa and holds a number of mining licenses in various provinces. The company also holds several prospecting rights in various provinces, mainly Mpumalanga, Kwazulu Natal, Northwest, and the Northern Cape. The company focuses on the prospecting of energy-related minerals. Table 2 reflects capital spent on exploration activities between 2015 and 2019. The Table shows that, the expenditure was at its highest in the year 2015 and began to decrease yearly until it was at its lowest in 2019 (African Exploration Mining and Finance Corporation SOC Ltd, 2015; 2016; 2017; 2018; 2019).

Table 2: AEMFC's expenditure on prospecting activities from 2015 to 2019 in South Africa.

Year	Expenditure (ZAR)
2015	134 070
2016	122 392
2017	67 137
2018	23 222
2019	22 97

4.2.2 Northam Platinum Limited

Northam Platinum Limited (Northam) was incorporated in the Republic of South Africa in 2006. The company held prospecting rights over Kolerboom farm where it prospected for copper, gold, massive sulphide copper, and zinc in the Northern Cape Province. The prospecting rights were granted in 2009. The financial statements indicated no capital was spent in prospecting activities in 2018 and 2019.

The company terminated the prospecting activities in 2019 and the application to close those prospecting rights was lodged at the Department of Mineral Resources and Energy (Northam Platinum Limited, 2021). The company has spent prospecting capital as shown in Table 3 from 2015 to 2017 in South Africa through joint ventures. As reflected on the table, the company spent large sum of capital during the year 2015, it decreased in 2016 and then slightly increased in the year 2017 (Northam Platinum Limited, 2015; 2016; 2017; 2018; 2019). This was followed by no expenditure in 2018 and 2019.

Table 3: Northam's expenditure on prospecting activities from 2015 to 2019 in South Africa.

Year	Expenditure (ZAR)
2015	1 700 000
2016	300 000
2017	400 000
2018	0
2019	0

4.2.3 Pan African Resources Limited

Pan African Resources PLC (Pan African) is incorporated in England and Wales under the UK Companies Act. The company has a dual primary listing on the Alternative Investment Market (AIM) of the London Stock Exchange (LSE) and Johannesburg Stock Exchange (JSE). The company is involved in the prospecting and mining of gold, PGM, and coal in South Africa.

The financial statements are presented in pounds sterling but were converted into South African Rands using average annual exchange rate for 2015, 2016, 2017, 2018 and 2019 respectively as shown in Table 4. As reflected on the Table, the company did not spend capital on year 1. Some capital was spent during the year 2016. In 2017, the company also spent capital on prospecting activities but it had slightly dropped when compared to the previous year. The spending increased in 2018 and it was highest in the year 2019.

Table 4: Pan African's expenditure on prospecting activities from 2015 to 2019 in South Africa (Pan African Resources Limited, 2015; 2016; 2017; 2018; 2019).

Year	Expenditure (Pound Sterling)	Exchange Rate	Expenditure (ZAR)
2015	0	1 pound=R19,5251	0
2016	380 296	1 pound=R19,9844	7 600 000
2017	355 624	1 pound=R17,1529	6 100 000
2018	617 948	1 pound=R17,639	10 900 000
2019	1 713 034	1 pound=R18,4468	31 600 000

4.2.4 Bauba Resources Limited

Bauba Resources Limited (Bauba) is a junior mining company that historically prospects for Platinum Group Metals (PGM). The group has shifted its focus from platinum prospection to chrome due to economic, social, and regulatory instability. In 2014, the company decided to suspend all the prospection of platinum in South Africa due to investor's unwillingness to commit long-term capital to develop deep, underground mining operations due to the negative mining sentiment caused by issues such as Eskom's high-power costs and unstable electricity supply; stringent labour laws resulting in poor productivity; corruption and poor service delivery in rural municipalities where mines are based which result in community unrest; uncertain regulatory and compliance environment with the implementation of the Mining Charter III.

It further indicated that long-term investment requires certainty over ownership rights. Furthermore, the threat of land being expropriated without compensation and increased ownership requirements from Mining Charter III have contributed to uncertainty for long-term investors (Bauba Resources Limited, 2019).

Bauba experienced restricted opportunities to raise capital for development of platinum assets. In 2014 financial year, the group decided to stop prospecting activities in the Eastern limb of the Bushveld Igneous complex. When the prospecting rights were to expire on the 17th of July 2015, the company lodged an application for retention permit in terms of Section 31 (1) of MPRDA. The approval of retention permit would have given the company further 3 years while holding the rights without having to spend any capital.

(Bauba Resources Limited, 2019). On 17 February 2016, the chief mine economist of the DMR, Limpopo Region gave a positive feedback on the retention permit application. However, in 2019 the DMR had not yet provided final decision regarding the outcome. Bauba then alternatively lodged an application for a mining right over the same areas where there were prospecting activities. Therefore, there were no exploration related expenditure for the period under study.

4.2.5 Mineral Commodities Limited

Mineral Commodities Limited (MRC) is listed on the Australian Stock Exchange. It conducts exploration, mining, and processing of heavy minerals in South Africa. It also conducts exploration activities of graphite in Western Australia. During the financial year 2014/2015, MRC held a prospecting right in the Eastern Cape province (Mineral Commodities Limited, 2015). In the following financial year (2015/2016), MRC held two prospecting rights in the Western Cape province, which were under judicial review.

The prospecting rights held in the Eastern Cape province were converted to mining rights in the same year. In the 2016/2017 financial year, the company was only left with two prospecting rights in the Western Cape province. During the financial year 2018/2019, the company only had one prospecting right, which was renewed in the same year. There was no expenditure incurred on prospecting activities during the year 2019. Table 5 shows the prospecting expenditure incurred in South Africa over a five-year period under consideration. The expenditure started extremely high in the year 2015, it then decreased

drastically in the year 2016 followed by a slight increase in the year 2017. It decreased in 2018 and there was no expenditure in 2019.

Table 5: MRC's expenditure on prospecting activities from 2015 to 2019 in South Africa (Mineral Commodities Limited, 2015; 2016; 2017; 2018; 2019).

Year	Expenditure (USD)	Exchange Rate	Expenditure (ZAR)
2015	6147	1USD=R12.7776	78 543 907
2016	178556	1USD=R14.7049	2 625 648
2017	364	1USD=R13.3055	4 843 202
2018	3972	1USD=R13.2488	52 624
2019	0	1USD=R14.4496	0

4.2.6 MC Mining Limited

MC Mining Limited (MC Mining) is a company incorporated in Australia. The company's common shares are listed on Australian Stock Exchange (ASX), AIM, and JSE. As stated by MC Mining Limited (2019), the company is involved in "acquisition, exploration, development, and operation of metallurgical and thermal coal projects in South Africa. The Group's principal assets and projects include Uitkomst Colliery, an operating metallurgical and thermal coal mine with an estimated 15-year life. Makhado hard coking, Vele Colliery and thermal coal project and the three exploration and development stage coking and thermal coal projects, namely Chapudi, Generaal and Mopane in the Soutpansberg Coalfield" (MC Mining Limited, 2019: p. 52). Table 6 illustrates the trend of capital spent on prospecting activities from 2015 to 2019 in South Africa. The table reflect that the expenditure began low in 2015 as compared to 2016. In 2017, it was lower than the two previous years. The spending rose again in the year 2018 and 2019.

Table 6: MC Mining's expenditure on prospecting activities from 2015 to 2019 in South Africa (MC Mining Ltd, 2015; 2016; 2017; 2018; 2019).

Year	Expenditure (AUD)	Exchange Rate	Expenditure (ZAR)
2015	4387000	1AUD=R9.5806	42 030 092
2016	5246000	1AUD=R10.9226	57 299 959
2017	1505000	1AUD=R10.2022	15 354 311
2018	1118000	1AUD=R9.875	11 040 250
2019	25198000	1AUD=R10.0429	253 060 994

4.2.7 Randgold and Exploration Company Limited

Randgold and Exploration Company Limited (Randgold) is an investment holding company with assets in mining. The company was incorporated in South Africa as a public company in 1992 and is listed on the Johannesburg Stock Exchange (JSE). During the financial year 2014/2015, the company spent R175 000.00 on prospecting activities. The cost of prospecting activities was R464 000.00 during the financial year 2015/2016.

The annual report for the financial year 2017 illustrated that the company sold its remaining prospecting right, namely Doornbosch, hence no expenditure was incurred in exploration activities (Randgold and Exploration Company Limited, 2017). From 2018 to 2019, the company did not spend capital on exploration as it sold its prospecting rights in the year 2017 (Randgold and Exploration Company Limited, 2018; 2019). See Table 7 for the company’s prospecting capital expenditure from 2015 to 2019. The Table shows that the company only spent capital on prospecting activities in 2015 and 2016. There was no expenditure from 2017 to 2019.

Table 7: Randgold's expenditure on prospecting activities from 2015 to 2019 in South Africa (Randgold and Exploration Company Limited, 2015; 2016; 2017; 2018; 2019).

Year	Expenditure (ZAR)
2015	175 000
2016	464 000
2017	0
2018	0
2019	0

4.2.8 Transhex Group Limited

Transhex Group Limited (Transhex) is a publicly listed company on the JSE. The company has been engaged in the exploration, mining, and marketing of diamonds for more than 50 years. The company reported prospecting expenditure in South Africa from 2015 to 2019 as reflected in Table 8. In 2019, the company did not incur any expenditure on prospecting activities and on 19 November 2019, the company indicated that it was going to de-list and the expected date of de-listing was 03 December 2019 (Transhex Group Limited, 2019). As reflected on Table 8 below, the company spending did not differ that much between 2015 and 2017. There was an increase in expenditure during the year 2018 that was followed by a year without expenditure in 2019.

Table 8: Transhex's expenditure on prospecting activities from 2015 to 2019 in South Africa (Transhex Group Limited, 2015; 2016; 2017; 2018; 2019).

Year	Expenditure (ZAR)
2015	2 171 000
2016	2 048 000
2017	2 947 000
2018	6 574 000
2019	0

4.2.9 Bushveld Minerals Limited

Bushveld Minerals Limited (Bushveld) focuses on production of vanadium and it owns high-grade assets of the same. Bushveld supplies approximately 3% of the global vanadium market. Furthermore, the company is part of the expansion and marketing of vanadium redox batteries (VRFBs) in the global energy storage market (Bushveld Minerals Ltd, 2019). The company also engages in the exploration, development, and mining of minerals such as coal, vanadium, iron ore, and tin in various countries. In South Africa, it had exploration projects for tin, iron ore, and vanadium. Table 9 presents the expenditure incurred by Bushveld on exploration in South Africa from 2015 to 2019. The Table shows that the company had low spending on prospecting activities between the year 2015 and 2017. The expenditure was high during the years 2018 and 2019.

Table 9: Bushveld's expenditure on prospecting activities from 2015 to 2019 in South Africa (Bushveld Minerals Ltd, 2015; 2016; 2017; 2018; 2019).

Year	Expenditure (Pound Sterling)	Exchange Rate	Expenditure (ZAR)
2015	18 275	1 pound=R19.5251	356 821
2016	8579	1 pound=R19.9844	171 446
2017	2514	1 pound=R17.1529	43 122
2018	289 941	1 pound=R17.639	5 114 269
2019	2 150 105	1 pound=R18.4468	39 662 556

4.2.10 Universal Coal Plc

Universal Coal Plc (Universal Coal) is a mid-tier coal mining company listed on the ASX. It has a portfolio of producing, developing, and exploration assets located across South African major coalfields. Table 10 illustrates the company's prospecting from 2015 to 2019. The table shows that the expenditure was fluctuating yearly, where 2015 spending was lower than the 2016. It dropped again in the years 2017 and 2018, followed by an increase in 2019.

Table 10: Universal Coal's expenditure on prospecting activities from 2015 to 2019 in South Africa (Universal Coal Plc, 2015; 2016; 2017; 2018; 2019).

Year	Expenditure (AUD)	Exchange Rate	Expenditure (ZAR)
2015	142 000	1AUD=R9.5806	1 360 445
2016	896 000	1AUD=R10.9226	9 786 649
2017	102 000	1AUD=R10.2022	1 040 624
2018	166 000	1AUD=R9.875	1 639 250
2019	1 093 000	1AUD=R10.0429	10 976 889

4.2.11 Wesizwe Platinum Limited

Wesizwe Platinum Limited (Wesizwe) is a publicly listed Company incorporated in the Republic of South Africa with a listing on the JSE. The company's focus of business is the development and mining of PGMs in South Africa. Over five years, starting from 2015 to 2019, the financial statements reported that the company had no plans to spend capital on exploration and that no expenditure was incurred on prospecting activities (Wesizwe Platinum Limited, 2015; 2016; 2017; 2018, 2019). Wesizwe Platinum Limited (2019) further indicated that there was no exploration expenditure planned for the financial year 2020.

4.2.12 Magnum Mining and Exploration Limited

Magnum Mining and Exploration Limited (Magnum) is a company that was domiciled in Australia, and it is listed on the ASX. The company conducts mining and exploration of emeralds in South Africa near the town of Gravelotte. In 2017, the company also began with an exploration project called the Tanami project in Australia, which was terminated in 2019. In 2019, the company acquired another exploration project called the Menzies project in Western Australia. The capital spent on prospecting activities in South Africa from 2015 to 2019 is presented in Table 11. The Table shows that the company had varying expenditures throughout the years. The 2015 spending was higher than that of 2016. The expenditure decreased again 2017 and in 2018 it began to increase. In 2019, the company spending on exploration was the highest.

Table 11: Magnum's expenditure on prospecting activities from 2015 to 2019 in South Africa (Magnum Mining and Exploration Limited, 2015; 2016; 2017; 2018; 2019)

Year	Expenditure (AUD)	Exchange Rate	Expenditure (ZAR)
2015	558 065	1AUD=R9.5806	5 346 597
2016	436 992	1AUD=R10.9226	4 773 088
2017	290 823	1AUD=R10.2022	2 967 034
2018	574 413	1AUD=R9.875	5 672 328
2019	1 074 751	1AUD=R10.0429	10 793 616

4.3 Analysis of the Total Prospecting Expenditure of Sampled Companies

In analysing the total prospecting disbursements incurred by all 12 companies annually, the expenditures from all the companies were added together each year to get the total capital spent per year. Twelve (12) companies were considered sufficient for this study as Fugard and Potts (2015) described the acceptable sample size for small and medium projects as between 10 and 100 for secondary sources. Figure 3 represents each company's contribution to overall annual expenditure from 2015 to 2019. The total expenditure for 2015 was R131 817 932, R85 191 182 in 2016, R33 762 430 in 2017, R41 015 943 in 2018 and R346 117 032 in 2019. The graphic representation of companies' annual contributions to the total each year is illustrated in Figures 3 and Figure 4.

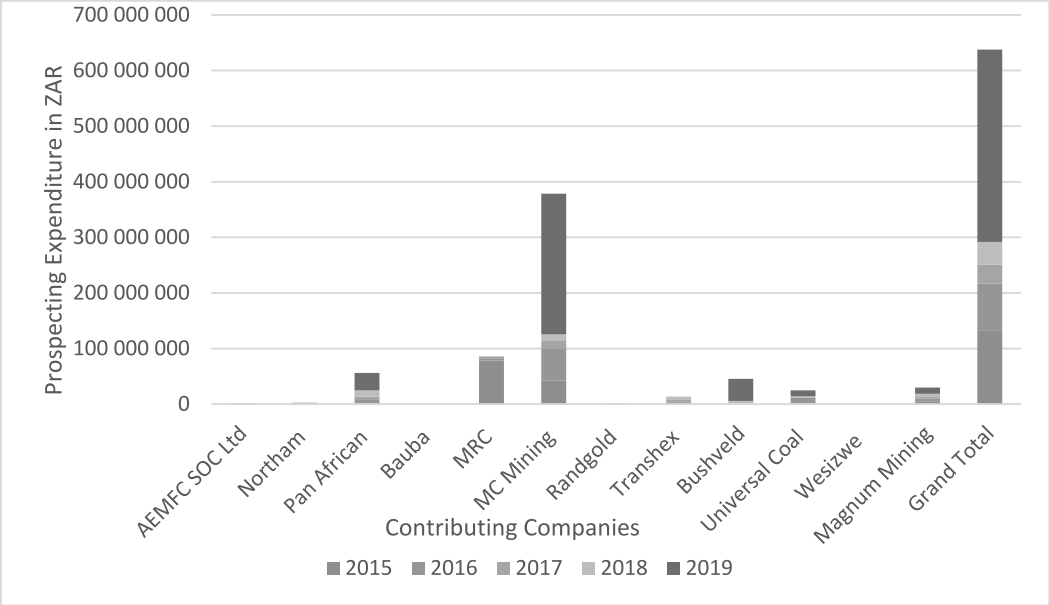

Figure 3: Combined prospecting expenditure incurred in South Africa by the 12 sampled companies listed on the JSE.

As shown in Figure 3 above, from the 12 companies in the sample, six companies (50%) spent less than R50 000, 000.00 on prospecting over five years from 2015 to 2019. Four companies (33, 3%) spent more than R50 000, 000.00 over the same period, where the companies spent more capital in the years 2015 and 2019. Two companies (16, 6%) did not invest any capital in prospecting during the period under consideration. Figure 4 below illustrates the trend of the total annual investment by the 12 companies.

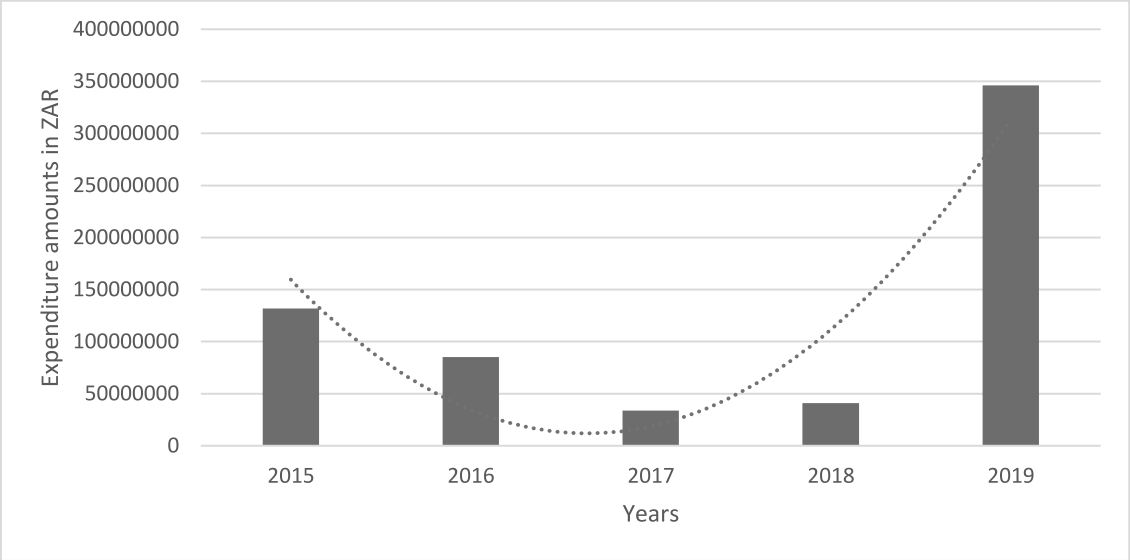

Figure 4 : The total annual expenditure incurred by all 12 companies.

As shown in Figure 4 above, the total spending by all companies was higher in 2015 when compared to the following three years, from 2016 to 2018. An increase observed in 2019 was higher than all the previous four years.

The data analysed shows that the investment in prospecting activities keeps fluctuating. The data gathered showed a variation in cumulative expenditure every year. The spending in 2015 was pretty high, followed by three years with lower costs. The spending increased again in 2019. The company that contributed to the increase in expenditure was MC mining, although other companies also contributed. Although it is too early to conclude, the increase in investment during the year 2019 may be an indication that investors were returning to invest in South Africa before the effects of COVID-19.

4.4 Chapter Summary

This chapter aimed to understand the trend in prospecting expenditure in South Africa. The analysis was achieved by randomly selecting 12 resource companies listed on the JSE. The period under consideration was from 2015 to 2019. The period was considered appropriate for the research, as it is a period after the 2008/2009 to 2014/2015 mining bust. The cut-off year of 2019 was selected as it was a year before the COVID-19 pandemic caused by the outbreak of the Coronavirus, which affected the world's economy. The ending year was selected to avoid distortions caused by companies' adjustments to lockdown rules from 2020 to 2021. Analysis of data gathered from 12 sampled companies found that 50% of companies showed decreasing expenditure from 2015 to 2019, 33, 3% of the companies showed high spending from 2015 to 2019, and 16, 6% of the companies did not spend any capital on prospecting activities from 2015 to 2019. The years 2015 and 2019 were the years with high expenditure compared to 2016, 2017, and 2018, but the overall trend has been fluctuating.

Chapter 1 of this study showed the graph on South African share of exploration budgets which Mineral Council South Africa published. As shown in the diagram, the expenditure has not been steady over the years and was declining. Since the data presented by Mineral Council South Africa ended in 2017, this study extended the data beyond 2017. This study also showed fluctuation in expenditure throughout the study period, with 2019 having the highest prospecting spending compared to the other four years.

5 PRESENTATION AND DISCUSSION OF COURT CASES

5.1 Overview of Chapter 5

This chapter aims to present and discuss data collected from several court cases relevant to the study's objectives and build into the foundation laid in the discussion on prospecting expenditure in Chapter 4. The PAJA in South Africa provides an opportunity for any person unhappy with an administrative decision to challenge that decision in a court of law (Hoexter, 2018). Hence, investors and government can approach courts when disputes arise during the administration of mining acts such as the MPRDA and other mining-related legislations and regulations.

Due to this reason, court cases that arose between the applicants of prospecting rights, the regulating department and the landowners were analysed. The details of court cases made it possible to identify specific sections of acts and regulations that resulted in disputes relating to applying and granting of prospecting rights and other issues relating to the granting and execution of prospecting work. The cases were useful in identification of factors that may affect the investor’s decision when deciding to invest in South Africa. The court cases were accessed online through published court cases on the Center for Environmental Rights and the Department of Justice websites

5.2 Procedures on Processing and Granting of Prospecting Rights

Any person who wishes to apply for a prospecting right can do so, and the Department of Mineral Resources and Energy. The applications are electronically lodged on the SAMRAD online portal (South African Government, 2022). The principal Act controlling the prospecting and mining activity is the MPRDA 28 of 2002, which is read together with the National Environmental Management Act 107 of 1998 as amended. Other relevant Acts are the Mine Health and Safety Act and Land Use Planning Ordinance 15 of 1985 as amended.

Prospecting right is granted in terms of Section 17 (1) subject to subsection 4 of the MPRDA. "The Minister must grant a prospecting right if:

- *The applicant has access to financial resources and expertise to conduct the proposed prospecting operation optimally.*
- *The applicant has a financing plan compatible with the intended prospecting operation and duration.*
- *The applicant can comply with the Mine Health and Safety 1996 (Act 29 of 1996).*
- *There is no contravention of MPRDA 28 of 2002.*
- *No other person holds a prospecting right, mining right, mining permit, or retention permit for the same mineral and land.*
- *The applicant demonstrates that no unacceptable pollution or environmental damage will occur because of the prospecting operation.*

(2) The Minister must refuse to grant a prospecting right if (a) the application does not meet the requirements referred to in subsection (1). (b) The granting of such right will:

(i) Result in an exclusionary act;

(ii) Prevent fair competition; or

(iii) Result in the concentration of the Mineral Resources in question under the applicant's control.

(3) If the Minister refuses to grant a prospecting right, the Minister must, within 30 days of the decision, in writing notify the applicant of the decision with reasons.

(4) The Minister may, regarding the type of mineral concerned and the extent of the proposed prospecting project, request the applicant to give effect to the object referred to in Section 2(d).

(5) the granting of a prospecting right in terms of subsection (1) becomes effective on the date on which the environmental management programme is approved in terms of NEMA" (Mineral and Petroleum Resources Development Act 28 of 2002: p28).

The above Section of MPRDA stipulates conditions to be met for the prospecting right to be granted and the procedure to be followed by the Minister to grant and refuse the applications. Therefore, where the procedures are not properly followed or conditions are not met, conflict may arise, resulting in a court of law. The courts are then vital in the interpretation of the Act and procedures. The court's decision becomes binding to both parties involved and sets the direction for the future processing of applications.

5.3 Case Studies of Court Cases

This section presents and discusses seven court cases relating to prospecting activities in South Africa. These cases involved Meepo ya Sechaba versus Jan Louis Kotze and

others, Aquila steel (S. Africa) (Pty) Ltd versus Minister of Mineral Resources and others, Shanduka Resources (Pty) Ltd versus Minister of Mineral Resources and others, Aquila Steel SA (Pty) Ltd versus South African Steel Company (Pty) Ltd, Bengwenyama ya-Maswazi community versus of Mineral Resources and other, Coal of Africa Ltd versus Akkerland Boerdery Pty Ltd and Mawetse (SA) Mining and Corporation (Pty) Ltd versus Minister of Mineral Resources and others.

5.3.1 Court case: 869/2006

The court case No. 869/2006 is a court case involving the issuing of a prospecting right to prospect for diamonds on the farm Lanyon Vale No.376 in the Magisterial District of Hay in the Northern Cape by the DME. The court case was between the following parties:

- Meepo ya Sechaba (applicant);
- Jan Louis Kotze (first respondent);
- Bathopele Mining Investment (second respondent);
- Regional Manager: Mineral Development and Administration, Northern Cape Region (third respondent);
- Minister of the Department of Mineral and Energy (fourth respondent); and
- First National Bank (fifth respondent).

Background of the case 869/2006

The applicant approached the first respondent, who is the landowner of Lanyon Vale no. 376 farm (property), requesting access to the land to commence prospecting activities as required in terms of Section 5(4) of the MPRDA, which states that (Mineral and Petroleum Resources Development Act No. 28, 2002: p 20):

> "*No person may prospect for, remove, mine, conduct technical co-operation, reconnaissance operations, explore for and produce any mineral or petroleum or commence with any work incidental thereto, on an area without".*

Furthermore, Section 5(4) (c) of the MPRDA states that (Mineral and Petroleum Resources Development Act No. 28, 2002: p 20):

> *"Notify and consult with the landowner and lawful occupier of the land in question"*

Following the applicant's consultation with the first respondent, the first respondent denied the applicant access to the property. The applicant then took the matter to court to seek immediate access to the property (Meepo vs Kotze and others, 2007).

Background to this case is that in July 2001, the first respondent applied for a prospecting permit for diamonds on his property before the MPRDA came into effect, and the notification for refusal was issued in May 2004 by the DME. The unfortunate part was that the refusal came after the DME had accepted the applicant's prospecting right application to prospect for diamonds on the first respondent's property.

The first respondent objected in writing to the granting of the prospecting right to the applicant on 15 June 2004, and the objection was not upheld. The right was then given to the applicant in 2005 and ultimately issued. The applicant then approached the first respondent to notify him of the intention to access the property, which the first respondent refused (Meepo vs Kotze and others, 2007).

Court finding

The court found that the fourth respondent (DME) failed to follow proper procedure, and the applicant's application was accepted on the grounds of failure by the fourth respondent to follow prescribed procedures. At the same time, there was a pending application from the first respondent (Jan Louis Kotze). The court also found that the fourth respondent failed to provide documentation that justifies the first respondent's application (Meepo vs Kotze and others, 2007). Therefore, the application that was granted to the first respondent, notarialy executed and registered in the Mineral and Title Registration was declared null and void. The third and the fourth respondents were directed to process the application of the first and second respondent. In addition, the applicant, the third and the fourth respondents were ordered to pay the first and second respondents' fees.

5.3.2 Court case: CCT 08/18

The court case No. CCT 08/18 is the review of a ruling by the Supreme Court of Appeal of the case the same court has ruled on involving the High Court ruling on the same matter. The court case was between the following parties:

- Aquila steel (S Africa) (Pty) Ltd (applicant);
- Minister of Mineral Resources (first respondent);
- Director General of the Department of Mineral Resources (second respondent);
- Deputy Director-General of the Department of Mineral Resources (third respondent);
- Regional Manager of the Department of Mineral Resources in the Northern Cape Province (fourth respondent);
- Pan African Mineral Development (Pty) Ltd (fifth respondent); and
- ZIZA (sixth respondent).

Background of the case CCT 08/18

The sixth respondent held a prospecting right under the Minerals Act 50 of 1991 before MPRDA came into effect. When MPRDA came into effect in 2002, the sixth respondent used the provision of Schedule II Transitional Arrangement to lodge conversion of rights application. Schedule II Transitional Arrangement, paragraph 8 stated that (Aquila Steel (S Africa) Pty Ltd vs Minister of Mineral Resources and others, 2018: p. 5):

> *"(1) Any unused old order right in force immediately before this Act took effect continues in force subject to the terms and conditions under which it was granted,*

acquired or issued or deemed to have been granted or issued for a period not exceeding one year from the date of which this Act took effect.

(2) The holder of an unused old order right has the exclusive right to apply for a prospecting right or mining right, as the case may be, in terms of this Act within the period as prescribed in subitem (1).

(3) An unused old order right in respect of which the application has been lodged within the period referred to in subitem (1) remains valid until such time as the application for a prospecting right or mining right, as the case may be, is granted and dealt with in terms of the Act or refused.

(4) Subject to subitems (2) and (3), an unused old order right ceases to exist upon the expiry of the period contemplated in subitem (1)".

On 19 April 2005, the sixth respondent decided to lodge its conversion application, converting a prospecting right from the old order right to the MPRDA. At the time of lodgment, the application did not comply with all the requirements of Section 16 of MPRDA.

Despite the application not meeting the requirements, the fourth respondent accepted the application on 17 August 2005. On 18 April 2006, the applicant applied for a prospecting right over the same land for the same mineral. The application was also accepted, while the sixth respondent's application was still pending finalisation. The order of processing applications according to the requirements of MPRDA was guided by Section 9(1) which states that (Mineral and Petroleum Resources Development Act No 28, 2002: p. 22):

"*If the Regional Manager receives more than one applications for a prospecting right, a mining right, as the case may be in respect of the same mineral and land, applications received on;*

(a) The same day must be regarded as having been received at the same time and must be dealt with in accordance with subsection (2)

(b) Different dates must be dealt with in order of receipt."

Furthermore, Section 9(2) of MPRDA states that (Mineral and Petroleum Resources Development Act No 28, 2002: p. 22):

> *"When the Minister considers applications received on the same date, he or she must give preference to the applications from historically disadvantaged persons*"

On 11 October 2006, the second respondent granted the prospecting right to the applicant. The applicant then spent a substantial amount of money conducting prospecting activities that led to the discovery of a large manganese deposit, leading the applicant to apply for a mining right (Aquila (S Africa) Pty Ltd vs Minister of Mineral Resources and others, 2018).

In 2008, the second respondent granted a prospecting right to the sixth respondent over the exact property and for the same mineral. As the applicant had already applied for a mining right, the first respondent then refused the applicant's mining right application on the basis that there is a prospecting right granted to the sixth respondent over the same land for the same mineral (Aquila (S Africa) Pty Ltd vs Minister of Mineral Resources and others, 2018).

The applicant then took the matter to the High Court, which found that, according to Section 16(1) of the MPRDA, a prospecting right lodged must meet all the requirements to be accepted. Section 16(3) of the MPRDA states that:

> *"If the application does not comply with the requirements of this section, the Regional Manager must notify the applicant in writing of that fact within 14 days of receipt of the application and return the application to the applicant"* (Mineral and Petroleum Resources Development Act No. 28, 2002: p. 28):.

Furthermore, Section 17(2) states that:

> "*The Minister must refuse to grant a prospecting right if—*
>
> *(a) the application does not meet all the requirements referred to in subsection (1);*
>
> *(b) the granting of such right will—*
>
> *(i) result in an exclusionary act;*
>
> *(ii) prevent fair competition; or*
>
> *(iii) result in the concentration of the Mineral Resources in question under the control of the applicant".*

In addition, Section 17(3) states that (Mineral and Petroleum Resources Development Act No. 28, 2002: p. 28):

> "*If the Minister refuses to grant a prospecting right, the Minister must, within 30 days of the decision, in writing notify the applicant of the decision with reasons."*

Therefore, the fourth respondent should have rejected the application for conversion from the old order right to new order right under MPRDA, which was lodged by the sixth respondent, as it was incomplete. The High Court also found that there was a "high degree of institutional incompetence" on the side of DMR (Aquila Steel (S Africa) (Pty) Ltd vs Minister of Mineral Resources and others, 2018: p. 12).

As a result, the court decided to set aside the decision by the DMR to accept the sixth respondent's application for a prospecting right and the decision to grant the sixth respondent a prospecting right. It also substituted the first respondent's decision to refuse the applicant's mining right and ordered the first respondent to grant mining rights to the applicant (Aquila (S Africa) Pty Ltd vs Minister of Mineral Resources and others, 2018).

Court finding

The first respondent took the High Court's ruling to the Supreme Court of Appeal under Case No: 179/2017, which overturned the decision of the High Court and its recommendation. The Supreme Court of Appeal then restored the first respondent's decision to grant the sixth respondent a prospecting right and refuse the applicant's mining right application (Aquila (S Africa) Pty Ltd vs Minister of Mineral Resources and others, 2018).

The applicant took the Supreme Court of Appeal's decision on review, where the judge overturned the decision and recommendations. The High Court's decision and recommendations were restored, except for the decision to direct the first respondent to

grant the mining right, as it is not within the court's jurisdiction to make such orders (Aquila steel (S Africa) Pty Ltd vs Minister of Mineral Resources and others, 2018).

5.3.3 Court case: A324/2016

The court case No. A324/2016 is a case in an appeal of judgment made in the High court case No. 12625/2013 regarding the granting of a prospecting right. The case involved the application of a prospecting right for nickel ore and various other minerals in the district of Vanrhynsdorp. The court case was between the following parties:

- Shanduka Resources (Pty) Ltd (appellant);
- Western Cape Nickel Mining (Pty) Ltd (first respondent);
- Regional Manager of the Department of Mineral Resources in the Western Cape Province (second respondent);
- Minister of Department of Mineral Resources (third respondent);
- Deputy Director-General of the Department of Mineral Resources (fourth respondent); and
- Hondekloof Nickel (Pty) Ltd (fifth respondent).

The dispute arose in the matter regarding whether the first respondent had effectively lodged its prospecting right application. The other issue was that there is an existing prospecting right application granted to the fifth respondent for the same mineral over the property in question. Due to the existence of a prospecting right granted to the fifth

respondent, the second respondent could not accept both prospecting right applications from the first respondent and the appellant (Shanduka Resources (Pty) Ltd vs Minister of Mineral Resources and others, 2017).

Background of the case A324/2016

The second respondent had decided to reject the application for a prospecting right which was lodged by the appellant, as there was already a pending application belonging to the fifth respondent. According to Section 16(2)(b) of MPRDA, the Regional Manager must accept an application for a prospecting right if "no other person holds a prospecting right, mining right, mining permit or retention permit for the same mineral and land" (Mineral and Petroleum Resources Development Act No 28, 2002: p. 26).

The appellant then took a matter to court on 9 September 2013, where an order was obtained under court case No. 12625/2013, setting aside the decision by the second respondent to refuse the application for a prospecting right. The second respondent was further ordered to accept and process the application in terms of Section 16 of MPRDA. As Sections 9(1) and 9(2) of MPRDA required the application to be dealt with in chronological order, the second respondent was further directed to treat the application as if it was received on 11 March 2013 (Shanduka Resources (Pty) Ltd vs Minister of Mineral Resources and others, 2017).

On 17 December 2013, under court case No. 20800/2013, the second respondent applied for the recession of the orders made under court case No. 12625/2013. The reason for

seeking a recession was that the second respondent was precluded in terms of the MPRDA from accepting the appellant's application due to that by 11 March 2013 there was already an application granted to the fifth respondent. The appellant then opposed the recession, arguing that the prospecting right granted to the fifth respondent had already lapsed by 14 February 2013 (Shanduka Resources (Pty) Ltd vs Minister of Mineral Resources and others, 2017).

The appellant's counter application led to an application by the first respondent (which is a company related to the fifth respondent) for leave to intervene as a respondent on the court case No. 20800/2013 and further seeking the following relief: "(1) A declaratory order that the first respondent be recognised as first-in-time for an application for a new prospecting right on the same farms and that the second respondent was obliged to accept and process the application which was lodged on 22 February 2013 which was before the application by appellant. (2) An order rescinding the order made under case No. 12625/2013 in favour of appellant. (3) An order dismissing appellant's counter application under case no. 20800/2015" (Shanduka Resources (Pty) Ltd vs Minister of Mineral Resources and others, 2017: p. 4).

The first respondent was incorporated in 2013 to undertake further exploration and development of the Hondekloof Nickel Project; this transpired in terms of a joint venture between Scorpion Mineral Processing Coal Mining and Processing (Pty) Ltd and the fifth respondent (Shanduka Resources (Pty) Ltd vs Minister of Mineral Resources and others,

2017). In this case, the first respondent argued that it tried to apply through the South African Mineral Resources Administration System (SAMRAD), which was unsuccessful. The company then decided to submit the documents manually. The application could not be accepted as there was already an application for renewal granted to the fifth respondent. The fifth respondent is a subsidiary of the first respondent. Due to that reason, the second respondent advised the fifth respondent to drop the new application and notarially execute the fifth respondent's prospecting right renewal. The second respondent then issued the prospecting right to the fifth respondent for three years (Shanduka Resources (Pty) Ltd vs Minister of Mineral Resources and others, 2017).

Court finding

In conclusion, the appeal was upheld. The court judgment made under court case No. 12625/2013, setting aside the decision by the second respondent to refuse the appellant's application for a prospecting right was also upheld, and the fourth respondent was ordered to accept and process the application lodged by the appellant. The court also ordered the first respondent to pay the appellant's costs (Shanduka Resources (Pty) Ltd vs Minister of Mineral Resources and others, 2017).

5.3.4 Court case: 14612/2013

The court case No. 14612/2013 involved the granting of a prospecting right in terms of Section 17 of MPRDA to carry out prospecting activities on the property situated in the

district of Thabazimbi in the Limpopo province. The court case was between the following parties:

- Aquila Steel SA (Pty) Ltd (applicant) and
- South African Steel Company (Pty) Ltd (respondent).

The prospecting right was issued from 18 July 2007 to 17 July 2012. On 12 April 2012, the applicant applied for a renewal of a prospecting right for three years. According to the provision of Section 18 of MPRDA, the applicant of a previous prospecting right is entitled to continue with the activities until the renewal application is granted or refused (Mineral and Petroleum Resources Development Act No. 28, 2002:).

Background of the case 14612/2013

When the DMR granted the principal prospecting right to the applicant in 2007, the farms to which the prospecting right relates were owned by Southern Palace Investments 216 (Pty) Ltd (owners). The applicant commenced prospecting activities without any problems with the owners. According to Section 19(2)(b) of MPRDA, the holder of a prospecting right must "commence with prospecting activities within 120 days from the date of which the right becomes effective in terms of section 17(5) or such an extended period as the Minister may authorise" (Mineral and Petroleum Resources Development Act No. 28, 2002: p. 26). Furthermore, Sections 5(4) and 5(4)(c) of the MPRDA must be observed. The applicant is required to notify and undergo a consultative process with the landowner. The process is the only opportunity where a landowner can raise objections before the

right is issued. After the prospecting right is issued, it is also essential to notify the landowners through proper notice to inform them of the intention to begin with prospecting activities (Aquila Steel SA (Pty) Ltd vs South African Steel Company (Pty) Ltd, 2014).
In August 2008, Southern Palace Investments 216 (Pty) Ltd sold the property in question to the respondent. On 15 September 2008, the new owners informed the applicant that they know of the existing prospecting right and intend to challenge the granting of prospecting right renewal. On 22 September 2008, employees of the respondent changed the locks to the separate entrance gate which the applicant used to gain access to the property, thus blocking access (Aquila Steel SA (Pty) Ltd vs South African Steel Company (Pty) Ltd, 2014).

Denial of access led the applicant to lodge an urgent application under the court case No. 2008/44438, applying for an order for the landowner to access the farm. The respondent ultimately agreed to allow access to the property but prohibited drilling activities on the property. Drilling was excluded from the approved documents and the terms and conditions of the prospecting right. The agreement was that until such time the applicant amended the approved documents, the applicant would not conduct any drilling activities on the property (Aquila Steel SA (Pty) Ltd vs South African Steel Company (Pty) Ltd, 2014).

Court finding

The applicant then applied to the DMR to amend the Environmental Management Plan (EMP). The EMP was approved on 3 September 2009 and after the approval of the EMP,

the respondent refused to allow the applicant to carry out further prospecting activities. After considering the applicant's and the respondent's arguments, the court concluded that there was no justification for denying the applicant access to the land. The court further ordered the respondent to allow the applicant access to the farms to carry out further prospecting activities (Aquila Steel SA (Pty) Ltd vs South African Steel Company (Pty) Ltd, 2014).

5.3.5 Court case: CCT 39/10

The court case No. CCT 39/10 involved a dispute of the granting of a prospecting right on a community land. The court case was between the following parties:

- Bengwenyama-ya-Maswazi Community (first applicant);
- Bengwenyama-ya-Maswazi Tribal Council (second applicant);
- Trustees for the Time Being of the Bengwenyama-ye-Maswati Trust (third to thirteenth applicants);
- Genorah Resources (Pty) Ltd (first respondent);
- Minister for Mineral Resources (second respondent);
- Director General of the Department of Mineral Resources (third respondent);
- Regional Manager of the Department of Mineral Resources in the Limpopo Province (fourth respondent);
- Deputy Director-General of the Department of Mineral Resources (fifth respondent); and

- Bengwenyama-ye-Maswati Royal Council (intervening party).

Background of the case CCT 39/10

The case occurred because of discrepancies about who is competent, in terms of Section 104 of the MPRDA (2002) which states that "any community who wishes to obtain the preferent right to prospect or mine in respect of any mineral and land which is registered or to be registered in the name of the community concerned must lodge such application to the Minister" (Mineral and Petroleum Resources Development Act No. 28, 2002: p. 86). It also sought to answer whether the company can apply for and be awarded a preferent community prospecting right.

The case followed a decision in 2006 by the second respondent to grant the first respondent prospecting rights on the two properties namely, Nooitverwacht and Eerstegeluk, of which later there was an order by the Constitutional Court for the second respondent's decision to be set aside. The basis for that order was a lack of consultation with the first applicant and failure by the second respondent to provide information about the first respondent, which at the time purported to represent the first applicant's interests to obtain an opportunity to make an application for a preferent prospecting right (Bengwenyama ya-Maswazi Community vs Minister of Mineral Resources and others, 2014).

In this case, the first respondent applied for a prospecting right in terms of Section 16. According to the first applicant, the first respondent did not do proper consultation as

required in terms of Section 5(4)(c) of MPRDA. Furthermore, the community also showed interest in applying for a prospecting right for the same mineral on the property including one of the farms in which the first respondent was interested in. The first respondent's application was accepted by the DMR on 20 February 2006, the department notified the first respondent to consult with interested and affected parties according to section 5(4)(c) of MPRDA.

The first respondent did not do the consultation, and the Environmental Management Plan (EMP) was submitted on 31 April 2006. The first applicant then lodged its application for a prospecting right in terms of Section 104 on 10 May 2006. On 9 June 2006, the first applicant concluded its investment agreement and lodged an application following proper procedures as required by the DMR. The fourth respondent did not accept the application as the fifth respondent had already granted a prospecting right to another party regarding one of the properties. On 14 July 2006, the first applicant submitted another application that met all the requirements, and it was legally accepted on 24 July 2006 by the DMR in terms of Section 16(2) of MPRDA which states that (Mineral and Petroleum Resources Development Act No. 28, 2002: p. 26):

"*The Regional Manager must accept an application for a prospecting right if;*

(a) The requirement completed in subsection (1) are met.

(b) *No other person holds a prospecting right, mining right, mining permit or retention permit for the same mineral over the same property."*

During the process, Kgosi (representative of the Bengwenyama community) indicated that the first respondent had not done proper consultation through a letter dated 6 October 2006. The first applicant was requested to pay a financial guarantee of its application before 20 November 2006, and it was paid on 10 October 2006. The first applicant argued that there was nowhere during the process where the DMR mentioned that the fifth respondent had already granted a prospecting right over one of the farms that the community applied for to the first respondent.

The first respondent's right was granted on 8 September 2006 and notarised on 12 September 2006. The first applicant was then informed on 6 December 2006 that the fifth respondent had refused the prospecting right as the fourth respondent had already issued the properties to another company (Bengwenyama ya-Maswazi community vs Minister of Mineral Resources and other, 2014).

The court also heard that the first respondent paid the financial provision on 15 September 2006, whereas the prospecting right was already issued. The EMP was approved two months after the first respondent had already been given the right. The first applicant then interdicted the first respondent from conducting any prospecting activities and then took the matter to court, seeking to set aside the decision by the second respondent to grant a prospecting right to the first respondent. The High Court then dismissed the application.

The first applicant then took the matter to the Supreme Court of Appeal, which rejected the application. The first applicant again brought the case to the Constitutional Court, which attended the application, and after hearing the arguments from all parties involved, the Constitutional Court found that the second respondent did not meet the conditions set out on Section 16(4) of MPRDA (Bengwenyama ya-Maswazi community vs of Mineral Resources and other, 2014), which states that; "if the Regional Manager accepts the application, the Regional Manager must within 14 days from the date of the acceptance notify the applicant in writing" (Mineral and Petroleum Resources Development Act No. 28, 2002: p. 26).

Furthermore, Section 10(1) of MPRDA states that (Mineral and Petroleum Resources Development Act No. 28, 2002: p. 22):

> *“Within 14 days after accepting an application lodged in terms of Section 16, 22, or 27, the Regional Manager must in the prescribed manner:*
>
> *(a) Make known that an application for a prospecting right, mining right or mining permit has been received in respect of the land in question.*
>
> *(b) Call upon interested and affected persons to submit their comments regarding the application within 30 days from the date of the notice".*

Court finding

There was an argument as to whether the DMR followed the proper procedure for issuing a notice in terms of Section 10(1). Furthermore, Section 104 of MPRDA ensures that, where the community is competing with a company for a prospecting right, the community

is preferred to prospect on the community land. The court found that the DMR should have informed the first applicant of the application being granted to the first respondent. Also, the first applicant should have been given preferent right before the application was granted.

The court also indicated that the third respondent failed to provide an affidavit to serve as evidence. The testimony would have justified that the decision-maker considered whether the environmental requirement of Section 17(1)(c) read together with Section 39(2) was satisfied before the right was granted. Hence, the court ruled in favour of the first applicant (Bengwenyama ya-Maswazi community vs Minister of Mineral Resources and others, 2014).

5.3.6 Court Case: 38258/2012

The court case No. 38258/2012 is about the denial of access for the purpose of prospecting. The court case was between the following parties:

- Coal of Africa Limited (first applicant);
- Regulus Investment Holdings (Pty) Ltd (second applicant); and
- Akkerland Boerdery (Pty) Ltd (respondent).

From the above parties that are involved on this court case, the first applicant engages in the exploration and mining of coal in South Africa. The second applicant is a company that participates in prospecting activities and is a subsidiary of the first applicant. The respondent is a private company that owns and holds the surface rights of farm Lukin 643 MS (property).

Background of the case 38258/2012

The case arose from the respondent, the owner of farm Lukin 643 MS (property), refusing to allow the first applicant access to the property to conduct prospecting activities. On 4 July 2012, the first applicant applied to the High Court, interdicting the respondent from denying entry to the property. The prospecting right was issued to the first applicant on 14 June 2006, and the first applicant lodged the renewal application on 25 November 2009 (Coal of Africa Ltd vs Akkerland Boerdery Pty Ltd, 2012).

The respondent was refusing access to the applicant due to uncertainty relating to whether the Department of Mineral Resources validly issued the prospecting right. The second issue was that the respondent claimed that the applicant did not consult about access to land. The respondent also contended that not all the requirements of MPRDA were met when the prospecting right was issued. The arguments were that the Environmental Management Plan (EMP) was invalid and that the Prospecting Work Programme (PWP) did not meet all the requirements of MPRDA.

The respondent also brought to court that the first applicant failed to register a prospecting right with the Mining Title Office as required by the Registration Act 16 of 1967. From the evidence presented, the court found that the property was allocated for mining activities (Coal of Africa Ltd vs Akkerland Boerdery (Pty) Ltd, 2012).

After hearing arguments from both the first applicant and the respondent, the court concluded that where the respondent alleged that the EMP and the PWP were invalid, it

was the responsibility of the respondent to approach the court and subject the documents to a review process. The court also indicated that until the validity of those documents has been set aside by the court of law, they remain valid. Concerning the claim by the respondent that the first applicant did not consult, the respondent did not dispute the fact that on 23 January 2012, the applicant wrote a letter to the respondent informing them of the intention to conduct drilling.

Court finding

The court concluded that the first applicant met the requirements of Section 5(4)(c). Regarding the municipal consent for land use according to Land Use Planning Ordinance (LUPO), the court found that the permission outlined in Clause 25(1) of the zoning scheme, which in its nature is standing and permanent exemption, entitles the first applicant to conduct the prospecting activities on the property insofar as the scheme is concerned (Coal of Africa Ltd vs Akkerland Boerdery (Pty) Ltd, 2012). In the end, the court concluded that the respondent's point of argument and defense did not warrant consideration and the court gave an order for the respondent to allow the applicant to enter the land and conduct prospecting activities for the duration of which the prospecting right will be renewed by the Department of Mineral Resources (Coal of Africa Ltd vs Akkerland Boerdery (Pty) Ltd, 2012).

5.3.7 Court Case: 20069/14

The court case 20069/14 involved the review of the Supreme Court of Appeal judgment with respect to the prospecting for chrome. The court case was between the following parties:

- Minister of the Department of Mineral Resources (first appellant);
- The Director-General of the Department of Mineral Resources (second appellant);
- Deputy Director-General of the Department of Mineral Resources (third appellant);
- Regional Manager of the Department of Mineral Resources in the Limpopo Province (fourth appellant);
- Dilokong Chrome Mine (Pty) Ltd (fifth appellant); and
- Mawetse (SA) Mining and Corporation (Pty) Ltd (respondent).

Background of the case 20069/14

Justice J Masipa's decision at the Supreme Court of Appeal was taken on review to determine if she was correct in her findings. On 24 November 2006, the fifth appellant applied for a prospecting right to search for chrome on Driekop 253 (property). The fifth appellant lodged a prospecting right application according to Section 16 of the MPRDA. The fourth appellant then accepted the application on 6 December 2006. Upon acceptance, the fifth appellant was requested to submit the additional information of which amongst it was shareholders agreement under Section 17(4) of MPRDA which states that "The Minister may, having regard to the type of mineral concerned and the extent of the

proposed prospecting project, request the applicant to give effect to the object referred to in section 2(d)" (Mineral and Petroleum Resources Development Act No. 28, 2002: p. 28).

Section 2(d) outlines the objects of MPRDA as to "substantially and meaningfully expand opportunities for historically disadvantaged persons, including women, to enter the mineral and petroleum industries and to benefit from the exploitation of the nation's mineral and petroleum resources" (Mawetse (SA) Mining and Corporation (Pty) Ltd vs Minister of Mineral Resources and others, 2015: p. 4).

The due date for submitting the requested information was 4 February 2007, and the fifth appellant never complied with the Black Economic Empowerment (BEE) requirement. Then on 18 July 2007, the third appellant notified the fifth appellant that the prospecting right was granted, and that the fifth appellant must comply with all other outstanding issues including the BEE requirement.

As the prospecting right was scheduled to be issued on 14 November 2007, the third appellant informed the representatives of the fifth appellant that the right could not be executed as the BEE requirements were not met. Also, the EMP that was submitted by the fifth appellant was never approved due to failure to comply with BEE requirements (Mawetse (SA) Mining and Corporation (Pty) Ltd vs Minister of Mineral Resources and others, 2015).

In September 2009, the respondent applied for a prospecting right for various minerals, including chrome over various farms and the property that was already granted to the fifth

appellant. The fourth appellant could not accept the respondent's application as there was already an existing application for the identical commodities over the same property.

Upon investigation, the respondent found that the fifth appellant's application was never notarially executed. They also found that the fourth appellant recommended that the right be granted for three years, but the third appellant then granted it for four years. According to respondent’s calculation, the recommended three years had lapsed on 13 November 2010, but the four years granted by the third appellant had not lapsed when the respondent lodged their prospecting right application at DMR.

The respondent then lodged an appeal with the first appellant on 28 October 2010. The first appellant did not consider the appeal, sighting that the matter was already in court. The respondent then went to challenge the decision to grant the fifth appellant a prospecting right at North Gauteng High Court in Pretoria. The challenge was met with a primary point stating that the respondent had not exhausted all the internal remedies as required in terms of Sections 96(1) of the MPRDA which states that (Mineral and Petroleum Resources Development Act No. 28, 2002: p. 82):

> *"Any person whose right or legitimate expectation has been materially and adversely affected or who is aggrieved by an administrative decision in terms of this Act, may appeal in the prescribed manner to-*
>
> *(a) The Director-General, if it is an administrative decision by the regional manager or an officer.*
>
> *(b) The Minister, if it is an administrative decision by the Director-General or designed agency”.*

Furthermore, Section 96(2) of the MPRDA states that “An appeal in terms of subsection (1) does not suspend the administrative decision unless it is suspended by the Director-General or the Minister, as the case may be” (Mineral and Petroleum Resources Development Act No. 28, 2002: p. 82). In addition, Section 96(3) of the MPRDA states that “No person may apply to the court for the review of the administrative decision contemplated in subsection (1) until that person has exhausted their remedies in terms of that subsection" (Mineral and Petroleum Resources Development Act No. 28, 2002: p. 82).

In July 2011, the respondent then approached the North Gauteng High Court applying for the court to compel the first appellant to consider the appeal. On 16 August 2011, the first appellant then considered the appeal, dismissed the respondent's appeal, and upheld the decision to grant the fifth appellant a prospecting right. The respondent then launched a review application (Mawetse (SA) Mining and Corporation (Pty) Ltd vs Minister of Mineral Resources and other, 2015).

The respondent then decided to take the matter to North Gauteng High Court where Justice J Masipa ruled that the fifth appellant had failed to comply with the condition attached to granting the prospecting right and thereby preventing execution of the right. Also, even if the third appellant granted the fifth appellant the right lawfully, the right was considered to have lapsed upon reaching the expiry date as the delay in notarial execution of the granted right was caused by the fifth appellant. Justice J Masipa declared that the prospecting right of the fifth appellant has lapsed and was invalid (Mawetse (SA) Mining and Corporation (Pty) Ltd vs Minister of Mineral Resources and other, 2015).

The judge then decided to set aside the decision of the fourth appellant to reject the respondent's application for a prospecting right. The court further decided to send the prospecting right application back to the third appellant for reassessment within 30 days. Lastly, the fifth appellant's counter application submitted to compel the DMR to execute the prospecting right notarially was dismissed (Mawetse (SA) Mining and Corporation (Pty) Ltd vs Minister of Mineral Resources and other, 2015).

Court finding

The first appellant took Justice J Masipa's ruling on a review at the Supreme Court of Appeal, which concluded that the North Gauteng High Court was correct in finding that the fifth appellant had failed to comply with granting condition, namely BEE compliance, and that the right was no longer existing as it had expired. The period of the right must be computed from the date on which the fifth appellant had received confirmation of the grant (Mawetse (SA) Mining and Corporation (Pty) Ltd vs Minister of Mineral Resources and other, 2015).

5.4 Discussion

In South Africa, judicial authority is vested in the courts that work independently. When investors and officials responsible for issuing prospecting rights and ensuring compliance once the rights are issued are in disagreements, their cases can end up in court if matters precipitating disagreements are not resolved internally. Therefore, once the court decide, the decisions are binding. Table 12 below summarises all the cases discussed above, highlighting the causes of conflict and the outcomes of the cases.

Table 12: Factors resulting in conflict and judgement outcome

Case Study	Parties Involved	Cause of Conflict	Court Ruling
Case Study 1 (Court case: 869/2006)	(1) Meepo Ya Sechaba. (2) Jan Louis Kotze. (3) Bathopele Mining Investment. (4) Regional Manager: DME Northern Cape. (5) Minister of DME. (6) First National Bank.	(1) Denial of access to the property by landowner. (2) Poor communication between DME and the prospecting right applicant. (3) Interest of property owner in acquiring a prospecting right	(1) The granted prospecting right to the applicant (Meepo Ya Sechaba) declared null and void. (2) The Regional Manager and the Minister of DME were directed to process the application of the Jan Louis Kotze and Bathopele mining Investment. (3) Meepo Ya Sechaba, the Regional Manager and the Minister were ordered to pay costs incurred by Jan Louis Kotze and Bathopele mining Investment.
Case Study 2 (Court case: CCT 08/18)	(1) Aquila steel (S Africa) (Pty) Ltd. (2) Minister of DMR. (3) Director General of the Department of DMR. (4) Deputy Director-General of the DMR. (5) Regional Manager of the DMR Northern Cape Province. (6) Pan African Mineral Development (Pty) Ltd and ZIZA .	(1) Not adhering to the requirements of the act by the administrator. (2) Granting of 2 companies prospecting rights over the same property and for the same mineral	(1) The decision by DMR to accept ZIZA's application for a prospecting right was set aside. (2) The decision by the Minister of DMR to refuse Aquila steel (S Africa) (Pty) Ltd's mining right application was set aside. (3) The court ordered the Minister to accept and process the Aquila steel (S Africa) (Pty) Ltd.'s mining right application.
Case Study 3 (Court case: A324/2016)	(1) Shanduka Resources (Pty) Ltd. (2) Western Cape Nickel Mining (Pty) Ltd. (3) Regional Manager of the DMR Western Cape. (4) Minister of DMR. (5) Deputy Director-General of the Department of DMR. (6) Hondekloof Nickel (Pty) Ltd.	(1) A challenge with SAMRAD online portal. (2) Poor interpretation of the law	(1) The court judgment made under court case No. 12625/2013, setting aside the decision by the Regional Manager to refuse S application for Shanduka Resources (Pty) Ltd's application for a prospecting right was upheld. (2) The Deputy Director General of DMR was ordered to accept and process the application lodged by the Shanduka Resources (Pty) Ltd. (3) The court also ordered the Western Cape Nickel mining (Pty) Ltd to pay the appellant's costs.
Case Study 4 (Court case: 14612/2013)	(1) Aquila Steel SA (Pty) Ltd. (2) South African Steel Company (Pty) Ltd.	(1) Denial of access to the land.	(1) South African Steel Company (Pty) Ltd had no basis to refuse the right Aquila Steel SA (Pty) Ltd access to the property. (2) South African Steel Company (Pty) Ltd ordered to allow Aquila Steel SA (Pty) Ltd access to the farms to carry out further prospecting activities.

Case Study 5 (Court case: CCT 39/10)	(1) Bengwenyama-ya-Maswazi Community. (2) Bengwenyama-ya-Maswazi Tribal Council. ((3) Trustees for the Time Being of the Bengwenyama-ye-Maswati Trust. (4) Genorah Resources (Pty) Ltd. (5) Minister for Mineral Resources. (6) Director General of the DMR. (7) Regional Manager of the DMR Limpopo Province. (8) Deputy Director-General of the DMR. (9) Bengwenyama-ye-Maswati Royal Council.	(1) Lack of consultation by applicant. (2)Administrator not following proper procedure	(1) The Genora Resources applying for prospecting right in not do proper consultation. (2) The community should have been given priority. (3) The prospecting right issued by the Minister of DMR was set aside. (4) The Minister of DMR was ordered to process and grant the community an exclusive right in respect to the property contested.
Case Study 6 (Court Case: 38258/2012)	(1) Coal of Africa Limited. (2) Regulus Investment Holdings (Pty) Ltd. (3) Akkerland Boerdery (Pty) Ltd.	(1) Denial of access to the land. (2) Property owner uncertain as to whether the EMP and PWP complied with the requirements of the Act. (3) Property owner claiming lack of consultation. (4) Property owner claiming that re-zoning was not done	(1) Akkerland Boerdery (Pty) Ltd did not have basis to refuse the Coal of Africa Limited access to the property. (2) Coal of Africa Limted provided proof of consultation. (3) Re-zoning approval was not necessary. (4) Akkerland Boerdery (Pty) Ltd was ordered to allow Coal of Africa (Pty) Ltd access to the property
Case Study 7 (Court Case: 20069/14)	(1) Minister of the DMR. (2) Director-General of the Department of DMR. (3) Deputy Director-General of the DMR. (4) Regional Manager of the DMR Limpopo Province. (5) Dilokong Chrome Mine (pty) Ltd. (6) Mawetse (SA) Mining and Corporation (Pty) Ltd.	Two companies competing to acquire prospecting right on the same property and for the same mineral	(1) The Dilokong Chrome Mine (Pty) Ltd did not comply with the granting condition. (2) The right granted to Dilokong Chrome Mine (Pty) Ltd did no longer exist as it had expired when the granting period ended, as the period of right should be computed from the day it is granted.

Table 12 above presents a summary of seven cases, illustrating the causes of conflict and the outcomes of those cases. Of the seven cases discussed, five of those involved the Minister of the Department of Mineral Resources (the Minster) and his/her subordinates (DMR officials), where the complainants were somehow aggrieved by the decision(s) made by the DMR officials. In all five cases where the Minister and DMR officials were involved, the court set their initial decisions aside, resulting in the outcome favoring the complainant. Based on the outcomes of the discussed court cases, the researcher believes that it may be possible for law administrators to have difficulties or differences in understanding the law and regulations being administered, thus resulting in incorrect decisions being taken. Therefore, the outcomes of the discussed court cases showed that the courts are significant in clarifying the differences or difficulties in understanding the law. The court decisions can be used for future reference when similar choices are supposed to be taken by the administrators.

The common problems identified in the examined cases consisted of the denial of access to the property by landowners, more extended periods of processing applications, and poor interpretation of the law, which led to granting two or more applicants a prospecting right on the same property. The Sections of the Act linked to these conflicts were administration of Section 16 of MPRDA, Section 17 (2) of MPRDA, Section 10 of MRDA, and Section 5(4) (c) of the MPRDA. Table 13 summarises factors precipitating disputes and related sections of the MPRDA.

Table 13: Summary of inhibiting factors based on seven case studies and related sections of the MPRDA

Case Study	Factors Identified	Main Cause of conflict	Related Act	Period taken to resolve the Conflict
Case Study 1 (Court case: 869/2006)	- Denial of access to the property by landowner - poor communication between DME and the prospecting right applicant - Interest of property owner in acquiring a prospecting right	Denial of access to property	Section 9(1) of MPRDA Section 5 (4)(c) of MPRDA	Conflict began :2001 Judgement delivered: 2007 Period: 6 years
Case Study 2 (Court case: CCT 08/18)	- Not adhering to the requirements of the act by the administrator - Granting of 2 companies prospecting rights over the same property and for the same mineral	Granting of 2 companies prospecting rights over the same property and for the same mineral	Section 9(1) of MPRDA Section 17 (2) of MPRDA	Conflict began :2005 Judgement delivered: 2019 Period: 14 years
Case Study 3 (Court case: A324/2016)	- A challenge with SAMRAD online portal - Poor interpretation of the law	A challenge with SAMRAD online portal	No link to Act or regulation	Conflict began :2013 Judgement delivered: 2017 Period: 4 years
Case Study 4 (Court case: 14612/2013)	- Denial of access to the land	Denial of access to the land	Section 18 of the MPRDA Section 5(4)(c)	Conflict began :2012 Judgement delivered: 2014 Period: 2 years
Case Study 5 (Court case: CCT 39/10)	- Lack of consultation by applicant - Administrator not following proper procedure	Lack of consultation by Applicant	Section 5(4)(c) Section 104	Conflict began :2006 Judgement delivered: 2010 Period: 4 years
Case Study 6 (Court Case: 38258/2012)	- Denial of access to the land - Property owner uncertain as to whether the EMP and PWP complied with the requirements of the Act - Property owner claiming lack of consultation. - Property owner claiming that re-zoning was not done	Denial of access to the land	Section 5(4)(c)	Conflict began :2009 Judgement delivered: 2014 Period: 5 years
Case Study 7 (Court Case: 20069/14)	- Two companies competing to acquire prospecting right on the same property and for the same mineral	Two companies competing to acquire prospecting right on the same property and for the same mineral	Section 96 of MPRDA Section 17(2) of MPRDA	Conflict began :2006 Judgement delivered: 2015 Period: 9 years

5.5 Lesson Learned

This Section examines how the court cases modeled the recent practices in the administration of MPRDA, which is the principal Act that controls the mining and prospecting activities in South Africa. DMRE is the department responsible for the administration of the MPRDA, which is why it has been involved in most court cases discussed. It should be noted that since the principal MPRDA was promulgated in May 2004, it has since been amended to address some of the challenges as witnessed through the court cases. The MPRDA was amended in 2008 and passed in 2009. Another amendment bill was gazetted in 2013, and it is in the process of being finalised. Hence, the time the court case occurred must have contributed to conflict depending on the version of the Act implemented at the time and understating the Act at the time.

The case between Meepo Ya Sechaba and Jan Louis Kotze began in 2004, which was during the transition period from the Minerals Act 50 of 1991 to the MPRDA 28 of 2002. During this time, administrators were in the process of understanding the law and how to handle applications that were not finalised before the MPRDA came into effect. This could have been one of the contributing factors to not handling the applications properly.

The case between Aquila steel (S Africa) (Pty) Ltd, Minister of Mineral Resources, and others began in 2005, a year after the promulgation of the MPRDA of 2002. The cause of the conflict was cited as non-adherence to the time frame by the DMRE and granting of two companies prospecting right over the same property. To address the issue, MPRDA

was amended in 2008 to substitute the wording in Section 9 of the MPRDA with the following:

"Section 9. (1) If a Regional Manager receives more than one application for prospecting right, a mining right or a mining permit, as the case may be, in respect of the same mineral and land, applications received on:
(a) The same day must be regarded as having been received at the same time and must be dealt with according to subsection (2)
(b) Different dates must be dealt with in order of receipt.
(2) When the Minister considers applications received on the same date, he or she must give preference to applications from historically disadvantaged persons" (Mineral and Petroleum Resources Development Act 28 of 2002 Amendment bill, 2013: p 7).
The amendment of the above Section dealt with the backlog in applications and granting of one property to different applicants. The actions indicated that the department learned from past mistakes and that an amendment to the Act was necessary to rectify it.

The court case between Shanduka Resources (Pty) Ltd and Western Cape Nickel Mining (Pty) Ltd began in 2013. During the Minister of the Department of Mineral Resources address on vote 29 in 2018, the Minister indicated that the internal investigation was done on the processing of applications and identified a backlog of applications dating back to 2012. The Minister further assured the public that the department would put measures in place to resolve the problem of a backlog of new applications. This clearly indicates the

department has been conducting internal diagnoses and trying to find ways to resolve issues that may negatively affect investment.

The case between Aquila Steel SA (Pty) Ltd and South African Steel Company (Pty) Ltd began in 2008. The case involved denial of access to the property, which the DMRE can assist in terms of Section 54 (1), which states that: "The holder of reconnaissance permission, prospecting right, mining right, mining permit must notify the relevant regional manager, if that holder is prevented from commencing or conducting any reconnaissance, prospecting or mining operations because the owner or lawful occupier of the property in question- (a) refuses to allow the holder to enter the land; (b) places unreasonable demands in return for access to the property; (c) cannot be found to apply for access.

(2) The regional manager must, within 14 days from the date of the notice referred to in subsection (1)

(a) *Call upon the owner or the lawful occupier of the land to make representations regarding the issues raised by the reconnaissance, prospecting, mining right, or mining permit holder.*

(b) Inform that owner or occupier of the rights of the holder of a right, permit, or permission in terms of the Act.

(c) Set out the provisions of the Act which such owner or occupier is contravening, and

(d) Inform the owner or occupier of the steps to be taken if he or she persists in contravening the provisions" (Mineral and Petroleum Resources Development Act 28, 2002: p56).

Section 54 of MPRDA has provided the Regional Managers with powers to intervene where they are informed about the denial of access to the property. Although the Regional Managers are involved in resolving these issues, some incidences still end up in court. In addition, during the meeting held by the select committee on Land Reform, Department of Environment, Department of Mineral Resources and Energy about the Annual Performance Plans. Implementing confidence-boosting measures dealing with land rights was cited as one of the core measures to be implemented. The Department of Mineral Resources and Energy described its plans to increase exploration expenditures by attracting investment (Parliamentary Monitoring Group, 2021). The plan's development is a sign that the DMRE has taken the denial of access to property seriously and is trying to find ways to resolve it.

Section 104 of the MPRDA is clear on how the applications involving the communities should be handled. The case between Bengwenyama Ya Maswazi Community, the Minister of Mineral Resources, and others occurred in 2006, just two years after the MPRDA was enacted. It should be noted that following this case, not many cases of this nature have been taken to court, which could indicate that Section 104 of MPRDA, which deals with preference right is becoming understood.

The case between Mawetse (SA) Mining and Corporation (Pty) Ltd, Minister of Mineral Resources, and others began in 2006 (Mawetse Court Case). The court judgment on this court case clarified when the effective date of the prospecting and mining rights period should begin. According to Mawetse Court Case, the DMRE was used to compute the

rights period from the date of notarial execution. However, as clarified by the court, the date should be computed from the date on which the right is granted to the applicant. Following the court judgment, the DMRE was bound by the court's decision on this case to start computing the period of rights issued from the day the right was granted. Therefore, court cases have shown significance in clarifying Sections of the acts that are not well understood, and the Judiciary has been assisting in the interpretation of MPRDA, which has been assisting in preventing similar problems from happening, which will boost the investor's confidence.

Once the conflicts arising from the acquisition of prospecting rights were analysed and understood, the next logical step was to engage with the people involved or interested in the South African prospecting activities. The purpose was to find out their perspective on the problems encountered when applying for and executing prospecting in South Africa. This was done through a survey that is discussed in the next chapter.

5.6 Chapter Summary

Seven court cases arising from conflicts between the applicants of prospecting rights, interested and affected parties, and the government were analysed. The purpose of the court case study was to identify the factors that led to the conflicts and deduce whether the causes of the issues could later be linked to the issues raised by the survey participants. Some cases discussed began as far back as 2000. The outcome of the analysis identified factors leading to court cases, such as the owners' denial of access to the property, which was linked to Section 5 (4) (c) of the MPRDA. Competition of one

amongst two or more companies over the same property and for the same minerals was connected to Section 17 (2) of MPRDA. Granting one property to two or more applicants was linked to Section 17 (2) and Section 9(1) of MPRDA. Lack or poor consultation with the landowners was related to Section 5(4) (c) of MPRDA.

After identifying the factors resulting in conflict and the related acts and regulations, it was studied whether the administration and the situations relating to those conflicts have changed. The outcome has shown that the government has learned from the cases and continues to improve to ensure better implementation of the law regulating the prospecting activities and preventing previous cases from repeating. Furthermore, the Judiciary plays an essential role in clarifying the Sections of the Acts not well understood by the administrators

.

6 PRESENTATION AND DISCUSSION OF DATA COLLECTED FROM A SURVEY

6.1 Overview of Chapter 6

The survey was conducted to understand the regulatory factors that may have contributed to the decline of exploration investment in South Africa. The questionnaire was crafted based on the requirements of the MPRDA, Land Use Planning Ordinance (LUPO) and administrative procedures of processing and granting of prospecting rights in South Africa. This chapter presents and discusses the data obtained through the questionnaire.

The objective was to identify regulatory factors that affect prospecting investment in the South African mineral sector. In this regard, a questionnaire comprising of four questions was developed and sent to twenty-five participants. The survey for this questionnaire was developed through an online Surveyhero website, which made it possible to design the questions online with automatic submission. The results of the questionnaire were analysed quantitatively.

6.2 Presentation of Questionnaire Results

A questionnaire comprising of four questions with Questions 2 having 12 sub-questions, respectively. Questions 1 and 3 consisted of closed-ended questions that required either 'Yes' or 'No' answers. While Questions 2 and 4 required yes and no responses, and further solicited the views of respondents based on the answers given. The questionnaire is been presented as annexure A at the end of this report.

The selected respondents comprised of company directors, right holders and exploration consultants. The information about respondents was obtained from the internet, which is the platform where most companies publish their profiles and from the DMRE. The required age of respondents was any person who is 18 years and above. The data was collected between June 2020 and September 2020.

Out of 25 people that were selected as respondents in the survey, only 15 responded with 14 sending back useful responses and one sending back a badly completed questionnaire that was rejected for this study. The 14 responses used in this study was considered sufficient as Fugard and Potts (2015) indicated that for studies to understand common perceptions and experiences amongst individuals with homogenous interests or characteristics, 12 respondents are considered acceptable. The subsequent subsections discusses results gathered from the survey. Table 14 below presents the results gathered from a survey.

Table 14: Summary of Survey Results

Question No	Question (s)	Number of Respondents	Responses	Percentage	Additional comments
Q1	Do you give consent for your responses to be used in the research project?	14	Yes	14 (100%)	
			No	0 (0%)	
Q2	What challenges relating to the Sections of the acts or regulatory obstacles below have you encountered when applying for Prospecting Right(s) or during the period of holding a Prospecting Right in South Africa? If you never had challenges, just indicate- None				
Q2 (i)	MPRDA Section 16(1)(a)(b)- Application process and Application fee	12	No	8 (66.7%)	The fees and processes are prohibitive to small scale and new entrants with limited capital; The period from application to granting is too long; there incidents of double granting and which caused delays, and Application fees and processes are too expensive.
			Yes	4 (33.3%)	
Q2(ii)	Section 17(1)(a) of MPRDA- proof of technical and financial ability	12	No	5 (41, 7%)	It was a challenge to acquire funding; The financial requirements at the application stage sometimes are the biggest obstacle. South Africa as a country is not doing enough to support the prospecting activities. Most opportunities end up in same group of people; Lack of financial ability, especially from the black community; It is difficult for clients who are starting without a prior operating business to enter the market; Consultants and experienced people in the market are too expensive for small companies, and Due to the long-time frame for processing applications by DMR, investors tend to pull out of projects before applications can be granted.
			Yes	7 (58, 3%)	
Q2 (iii)	Section 18(1) and Section 18(2) of MPRDA- requirements for renewal of right.	12	No	9 (75, 0%)	The government is not doing enough to implement the compliance of the legislation to comply with the charter. So, renewals are only ceremonial instead of following the requirement as per the law; The process should be easy, and the turnaround time on the applications in long.
			Yes	3(25, 0%)	

Q2 (vi)	Sections 19(2)(a), 19(2)(b), 19(2)(c), 19(2)(d), 19(2)(f) & 19(2)(g) of the MPRDA- Obligations of a prospecting right holder	12	No	9 (75, 0%)	The department is not doing enough to deal the compliance of companies that re issued with the prospecting rights to ensure that the comply with the legislation. Although the communities can see the non-compliance, they cannot do much as it is the responsibility of the regulator, and If the applicant intends to prospect on area that has been previously mined or prospected with the remains of old workings, they are required to rehabilitate the area, which can be an obstacle of old mine working if there one.
			Yes	3 (25, 0%)	
Q2 (v)	Section 5(4)(c) of MPRDA - Consultation with landowners by the investor or applicant	12	No	4 (33, 3%)	Landowners make it challenging to access the land after the right has been granted; Most landowners demand high rental amounts on their properties. There is a need to improve the processes, more especially the appeal process that can take unwarranted time to be finalised. There is a need to have defined timeline because some appeal processes with landowner issues (including NEMA) have been prohibitively. This result in a costly wait for potential investors and potential beneficiaries in those projects;
			Yes	8 (66, 7%)	It is difficult to find the property owner's contacts, especially where the property is held by the Trust. Widened does not always have contact information; Property owners have demands; The department is not doing enough to assist in situations where the property owners deny access or place unreasonable demands. Most farm owners don't support mining, and they think it will have an impact on the farming activities, and Landowners make it difficult for prospecting right holders to access the land, which makes foreign investors pull out of projects. When agreement is reached with the farm owner, there is no capital to implement the prospecting activities.
Q2 (vi)	Section 2(b) of MPRDA - Acceptance of an application	12	No	7 (58, 3%)	As an applicant, I can be given portions or property that were not applied for; Not receiving acceptance letter of an application on the expected date; Political involvement and community involvement on the application lodged can prolong the duration of acceptance, and It takes time for the application to be accepted.
			Yes	5 (41, 7%)	

Q2 (vii)	Section 9(1) of MPRDA - Handling of application received on the same day	12	No	10 (83, 3%)	Spending money when not sure that you will be considered is a financial risk, and DMR turnaround time of handling applications is a problem.
			Yes	2 (16, 7%)	
Q2 (viii)	Section 19(2)(b) of MPRDA - Commencement of prospecting activities after the right are issued	12	No	7 (58, 3%)	It is challenging to begin within the stipulated time due to problems with landowners; Sometimes, communities and landowners refuse access for different reasons. The department could facilitate this by performing operational inspections within 90 days of granting to ensure that companies start with the operations as soon as they are granted the rights; Granting and execution period is far apart. The commencement is calculated from granting, but you can only start after execution. The execution time can happen after a year or two after granting, and Landowners make it challenging to commence prospecting activities on time as they deny access to the land.
			Yes	5 (41, 7%)	
Q2 (ix)	Section 10(1) of MPRDA - Advertisement notices of acceptance of prospecting right applications by the DMR	12	No	12 (100%)	None
			Yes	0 (0, 0%)	
Q2 (x)	Section 2(d) of MPRDA and Mining Charter requirements - Black Economic Empowerment requirement for prospecting rights	12	No	7 (58, 3%)	It is not easier to comply with BEE considering that prospecting is costly and not income-generating activity; Mining Charter regulations keep changing Companies are generally unwilling to transform and involve HDSA partners, communities, and employees. Even in the supply chain, this is usually racist and protectionist. Therefore, the exact figures that have been benefiting continue to benefit. And surrounding communities continue to battle for the crumbs, and BEE requirements for prospecting rights are not easy to comply with, as prospecting activities are costly. Most people are not willing to risk losing capital on prospecting activities.
			Yes	5 (41, 7%)	

Q2 (xi)	Section 96(1) of MPRDA - Handling of appeal of aggrieved applicants by DMR	12	No	7 (58, 3%)	It takes time, and the department can dismiss an appeal with no valid reason; There must be defined period from when an appeal is lodged to completion and stick to it; The REMDEC takes time to sit. This is not good for investors; Political involvement and corruption and delays affects the appeal process, and An application can be dismissed without valid reasons.
			Yes	5 (41, 7%)	
Q2 (xii)	Section 14of the Land Use Planning Ordinance Act 15 of 1985 - Application for land use rights	12	No	7 (58, 3%)	It takes time to get rezoning approved; This application takes at least two years and is made through the local municipalities. It causes unnecessary delays; A farmer can cut trees without a permit, or communities can cut trees and clear land without a permit. Nevertheless, mining companies must get a permit. So, the system needs to be improved so that all land users can see the land use process as fair; Private farm owners are a significant challenge when applying for zoning on private land, and It takes time to get zoning approval.
			Yes	5 (41, 7%)	
Q3	Is the South African investment climate favorable for you to invest in prospecting?	12	No	8 (66, 7%)	None
			Yes	4 (33, 3%)	
Q4	list any other challenges they may have encountered in the process of applying for prospecting rights	Overlying of Prospecting Rights by different companies in the same land. The overlying has caused a significant headache; Timeline from application to granting/refusal decision point including appeal seems arbitrary. No consistency in application processing; The DMR database is not up to date. When applying, you spend too much money only to find out that there is already an existing application. The Prospecting Rights applications take over five years in other provinces; Timelines of processing applications are long and frustrating; The department communication and SAMRAD is the problem; Land disputes between the right holder and the property owners, and Delays in processing and granting of applications and corruption.			

6.3 Discussion of Responses

The survey conducted has led to identification of several factors that respondents indicated are problems when they are in a process of either acquiring a prospecting right or after the right is granted, the identified factors were analysed and the responses that were repeated by three or more participants were the issues of concern. The subsequent paragraphs illustrate issues emanating from the responses above. The identified issues were further related to conflicts that resulted in court cases. Figure 4 below provide a summary of major factors listed affecting or hindering prospecting in South Africa.

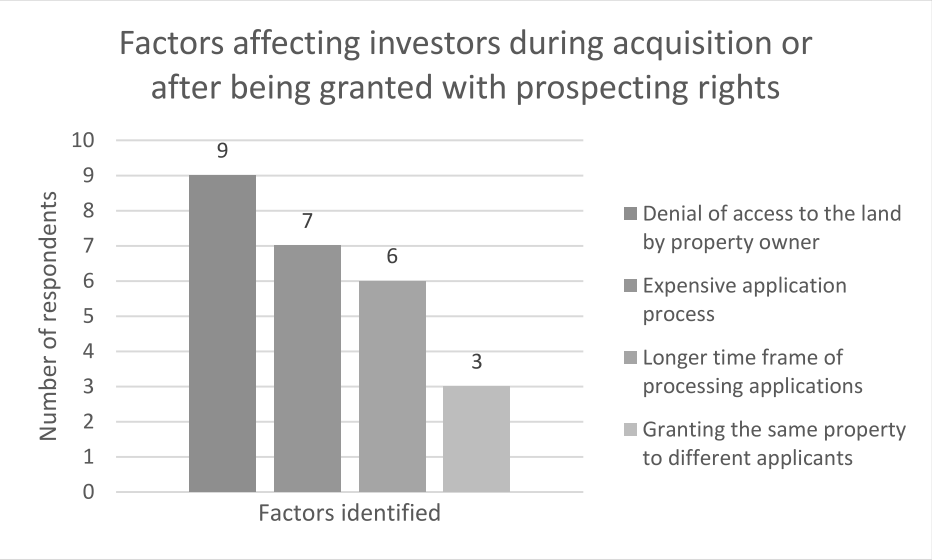

Figure 5: Factors affecting investors during acquisition or after being granted prospecting right in SA.

The purpose of the study was to identify regulatory factors hindering investment in South African exploration. As reflected in Figure 4 above, most respondents who participated in the survey indicated that denial of access to the property was the issue of concern. This can be corroborated to one of the problems that resulted in two court cases discussed in

Chapter 5, where prospecting right holders and the property owners took each other to court to resolve their conflicts. Core to these conflicts was Section 5(4) (c) of the MPRDA, which requires the prospecting right holder or applicants to consult with the property owner before accessing the prospecting right area. It is noteworthy that property owners refuses access as they feel not properly consulted by the applicants intending to prospect on their land or refusal to accept co-existence of activities they are undertaking on the land with the mining activities.

Although the denial of access is the major challenge. Where the DMRE gets informed, the Regional Manager of the specific region have the power to intervene and assist in resolving the issue. MPRDA gives the Regional Manager powers to intervene and resolve the issue in terms of Section 54 (1). It states that: "*the holder of a reconnaissance permission, prospecting right, mining right, mining permit must notify the relevant regional manager, if that holder is prevented from commencing or conducting any reconnaissance, prospecting or mining operations because the owner or lawful occupier of the property in question-*

(a) refuses to allow such holder to enter the land; (b) places unreasonable demands in return for access to the property; (c) cannot be found in order to apply for access.

(2) The regional manager must, within 14 days from the date of the notice referred to in subsection (1)

(a) Call upon the owner or the lawful occupier of the land to make representations regarding the issues raised by the reconnaissance, prospecting, mining right or mining permit holder.

(b) Inform that owner or occupier of the rights of the holder of a right, permit or permission in terms of the Act.

(c) Set out the provisions of the Act which such owner of occupier is contravening, and

(d) Inform the owner or occupier of the steps to taken if he or she persist in contravening the provisions" (Mineral and Petroleum Resources Development Act 28, 2002: p56).

The costs associated with the prospecting right application was raised as the issue of concern by respondents. These are the costs incurred by the applicants of prospecting rights from the stage when the application is lodged until the right is issued. It comprises of costs associated with lodging the application and acquiring consultants and specialists to compile all the required documents for the application. The South African government website indicated that there are no stipulated costs associated with prospecting right application in South Africa. The cost is dependent on the mineral under application. The issue of costs was the new challenge brought up by the respondents, as it was not identified as an issue for concern in court cases.

The time taken to process the application was also identified as one of the problems encountered by applicants. This is the time taken to process the application from the date it is received to the date the prospecting right is granted to the applicant. The applications for prospecting rights are lodged as described in Section 16 of the MPRDA, guided by Regulation 7(1) of the MPRDA and granted according to Section 17 of the same act. Applications for Environmental Authorisation must also be lodged. From the day the application is lodged, it should be accepted or rejected within 14 days by the Regional

Manager (Mineral and Petroleum Resources Development Act 28, 2002). An application for an EA must be acknowledged within 10 days from the day it was lodged (National Environmental Management Act 107, 1998 amendment).

Starting from the day of application, the applicant has 90 days to submit the Basic Assessment Report (the period can be extended to 50 days). DMRE has 107 days to review the documents and decide. If the decision results in granting a right, there is 20 days period for interested and affected parties to appeal the decision (National Environmental Management Act 107, 1998). Considering the above processes, it can take up to 267 days for the applicant to receive a prospecting right. This can cause delays in discovering new resources, which further impedes the attainment of mineral policy objectives.

Two or more applicants competing for the same property and to prospect for the same mineral has been identified as one of the challenges faced by the prospecting applicants. This issue can directly be linked to problems leading to five court cases discussed in Chapter 5, where companies, DMRE and the community took each other to court to resolve conflicts. The legal framework that mainly was implicated in those court cases was Section 9(1)(b) of MPRDA. However, the Act has since been amended, and Section 9(1)(b) no longer applies. After the survey assisted in identification of the factors presented above, the government's views on challenges facing the investors were gathered. The subsequent section will present and discuss the government's findings and the intervention measures.

6.4 Government's Intervention to Resuscitate the Exploration Activities

It was also essential to assess the views of the government regarding the issue at hand and find out whether the government has a plan to resolve the identified problems. The DMRE has developed an exploration implementation plan to identify the barriers affecting the investment in prospecting activities and develop strategies to solve the identified challenges. The department has identified several regulatory and administrative factors which are seen to be interfering with investment in South African prospecting activities. Table 16 shows the identified factors and proposed interventions that were identified by the DMRE (Department of Mineral Resources and Energy, 2022).

Table 15: DMRE's identified factors affecting investment in exploration and intervention measures

Identified Regulatory Factors	Proposed Interventions
The timeframes provided for on MPRDA not efficient for some of complex mineral deposits and geological settings	The DMRE plans to develop legislative instruments to address the timeframe barrier. The proposal is for an amendment of MPRDA to address the issue.
Existence of prospecting rights that have lapsed beyond their period granted, thus sterilising the minerals	Urgently take corrective measures on prospecting rights that have existed beyond their legislated tenure Conduct urgent assessment of active prospecting rights including quantification of value, catalytic value, and employment creation. Urgently invest in an efficient mining cadastre system (online licensing system) and make it a priority. Furthermore, the mining industry committed to support DMRE both financially and with technical expertise.
Lack of financial support resulting on inactive issued prospecting rights. Thus preventing graduation of prospecting rights to mining rights	DMRE plans to strengthen the administrative processes to prevent inconsistencies on the of interpretations of requirements and deploy due diligence mechanisms throughout the processing of a prospecting right using multidisciplinary approach to prospecting rights application assessment as envisaged in Section 17 of the MPRDA, and its Regulations Encourage established mining companies to contribute towards a minimum of R200 million IDC established "junior exploration fund" using relevant transformation legislations.
Refusal of access to privately owned properties is increasingly becoming a barrier to prospecting activities	The DMRE plans to enforce provision of Section 54 of the MPRDA, as it was not previously untilised to promote and nature the prospecting activities. Invocation of provision of Section 55 of the MPRDA, which gives the Minister of DMRE authority to expropriate land for the purpose of promoting prospecting activities. Amendment of geoscience Act for land access is required to strengthen its provisions.
The principle of first come first serve as stipulated on the MPRDA negatively affects the implementation of prospecting activities	Proposal of first come first serve system to be replaced with meritocratic system that considers national developmental imperatives. This can be achieved through amendment of MPRDA.
Existence of policies and legislations such as open ended appeal and objection processes in NEMA which result in extended timeframes, the application for spatial planning and Land use planning ordinance are inconsistent with intension of sustainable development of minerals	Efficient mechanism to address long period of appeals and objections (as catered for in the NEMA) is required. Recommendation is for maximum appeal period to be 30 days. Realignment of requirements in various legislations (environment, water, mining, land use etc.) to enhance timeous finalisation of authorisations and security of tenure.

Processes and Systems Barriers	Proposed Interventions
Longer timeframes of processing applications for transfer or prospecting rights, new prospecting rights, renewals of prospecting rights and amendments of conditions of the prospecting rights in terms of Sections 11, 17, 18 and 102 of the MPRDA	Immediate investment in an efficient and transparent cadastral system
Unethical behaviour of some officials and certain industry protagonists and granting multiple applicants prospecting right on the same property.	Remove prospecting rights that exist beyond the timeframe, revoke the inactive rights, update the system and maintain accurate records of existing prospecting rights
Instead of considering aspects such as economic, transformative, legal, geoscientific, social and environmental as a holistic licensing approach. The current administration of prospecting rights mostly focus on process and compliance	Urgent implementation of multidisciplinary approach for licensing processes, while considering, amongst others, aspects such as commodity ranking by priority.

As presented above, the DMRE has identified several barriers that affect investment in prospecting activities in South Africa. Some of the identified factors mentioned by the questionnaire respondents, such as denial of access to the properties, longer timeframes taken when processing applications, and granting of one property to multiple companies, could corroborate to barriers identified by the DMRE. Essential is that DMRE also has a proposed plan on how the identified factors can be resolved, which is the plan that DMRE intends to implement to enhance investment. The proposed interventions are specific and goal orientated. Therefore, if the developed plan is adhered to, it can change the perception of investors, thus yielding positive results.

6.5 Chapter Summary

A survey was conducted with the purpose of identifying factors affecting investors during and after the acquisition of prospecting rights. The survey results identified several factors that are viewed to may have contributed to the decline of investment in exploration. These issues are considered problematic as they were repeated several times by different respondents. These factors are:

- The DMR takes a long time when processing the applications;
- Restriction of access to the land by landowners after the right has been granted;
- High costs of complying with the requirements of the MPRDA, including NEMA, and
- Two or more prospecting rights were granted on the same land for the same mineral.

The analysis showed that some issues identified by the survey were similar to those that led to conflict in court cases discussed in chapter 5. The problems linked to the court cases were denial of access to the land and granting a prospecting right on one property to two or more applicants.

After the factors were identified, the government's view on the challenges faced by the investors and the proposed intervention measures were also studied. The gathered information revealed that the DMRE is aware of the challenges identified in this study and has proposed intervention measures to resolve them. The intervention plan by the DMRE is considered adequate to resolve these issues. However, resources and proper monitoring of its implementation will be vital for its success.

The next chapter will conclude the research by summarising the entire research and providing some recommendations. Recommendations are presented based on the findings of the data collected and discussed.

7 CONCLUSION AND RECOMMENDATIONS

7.1 Overview of Chapter 7

This chapter presents the outcomes and recommendations regarding regulatory factors hindering investment in the exploration phase of the South African mining value chain. The research findings were based on data collected through document review of court cases, the company's annual reports, and the survey questionnaire sent out randomly to some individuals interested in the prospecting activities.

7.2 Research Conclusions

The report released by the Mineral Council South Africa in 2017 showed that the South African share of the African exploration budget declined between 2007 and 2017. It further indicated the cause of decline to include regulatory hindrance, competition from other resource-rich countries, and regulatory uncertainty, among other issues. Among all these, this research aimed to identify the regulatory factors that may be hindering investment in the prospecting phase of the mining value chain in South Africa. The methods employed in gathering and analysis of data made it possible to answer the research questions presented in chapter 1 of this report. Based on the data presented and discussed in chapters 4, 5, and 6, the following conclusions were arrived at:

- The analysis of the companies' exploration expenditure, number of companies, and the period of analysis were sufficient to determine the trend of investment in prospecting activities in South Africa and to extend beyond the year 2017, which

is the year that the graph presented by Mineral Council South Africa ended. This study extended the diagram to the year 2019, which was before the COVID-19 outbreak.

The results from the twelve companies presented and discussed showed that six, which translates to 50%, reflected that the expenditure on prospecting was lower than the other four companies assessed in this study as their total 5-year spending fell below R50 000 000.00. Four companies, which translates to 33. 3% have shown high prospecting expenditure above R50 000 000.00, especially during 2015 and 2019. Two companies, which translates to 16. 6% did not invest any capital in exploration between 2015 and 2019.

Furthermore, the expenditure incurred by companies engaging in prospecting activities showed a fluctuation in the investment in prospecting activities, in line with the observation by Mineral Council South Africa (2017). The overall trend of data collected for this study over five years shows that the spending on prospecting activities was high between 2015 and 2019, hinting at a possible renewed prospecting interest in South Africa.

- The review of seven court cases relating to the acquisition of prospecting rights identified factors that resulted in conflict between the property owner, government, or among investors. Five of the seven cases were companies contesting for the same mineral and property. The Sections of the MPRDA Act that were linked to

the court cases were Sections 9(1), 16(1), 17(2), 5(4) (c), and 10 of the MPRDA. The judgments of all five cases revealed the differences or poor interpretation of the law, which resulted in the wrong decision made by the administrators of MPRDA. Hence, the decision made by the DMRE was set aside by the court.

Two of the seven were because of conflict caused by the landowners denying the prospecting rights holders access to the land for prospecting activities and consultation. The Section of the Act linked to the court cases was the administration of Section 5(4) (c) of the MPRDA.

- The questionnaire composed of four questions was developed and sent to 25 participants, and only 15 responded. Out of 15 respondents, only 14 completed the entire survey, and one was rejected as it was badly completed and not useful. The number of participants was considered sufficient for studies aimed at understanding common perceptions and experiences amongst individuals with homogenous interests or characteristics. The questionnaire link was sent through either email or Short Message Service. Once completed, the responses were uploaded to eSurveyCreator website for analysis.

The survey results identified several factors that are perceived to be regulatory hindrances and by extension may have contributed to the decline of investment in exploration. These issues are considered problematic as they were repeated more than three times by different participants. These factors are:

(i) Denial of access to the land by property owners.

(ii) Expensive application process.

(iii) Longer timeframe of processing applications.

(vi) DMRE grants two or more applicants the prospecting right to prospect for the same mineral on the same property.

- The assessment of what the government is doing to resolve the identified issues has revealed that the DMRE has developed a plan, which first identified several factors affecting investment in South African prospecting activities. The identified factors consist of some of the factors identified in this study, such as but are not limited to; denial of access to properties, longer time taken to process applications, and granting of one property to multiple applicants. On a positive note, the DMRE further developed interventions on how the identified barriers can be resolved to try to gain investors' confidence. The plan presented by the DMRE is good, and if it is properly implemented and monitored, it can be fruitful in solving the issues at hand. The subsequent Section presents the recommendations based on the study findings and conclusion.

7.3 Recommendations

Following the findings and conclusion of the study, where factors affecting the investment were identified. The following recommendations are suggested:

- As the government already has a plan to intervene in the identified challenges, it is recommended that the DMRE also put a monitoring plan and fast-track the implementation. The fast-tracking will ensure that the plan is not only pleasing on paper but should contribute to solving the challenges currently faced and prevent the effects that the decline of investment in exploration can have on the competitiveness of the South African mining industry.

- It is suggested that the government make resources available for the fruitful and timeous implementation of the developed plan, as a lack of human and financial resources can also hinder the plan's successful implementation.

7.4 Recommendations for Future Research

- This study collected data from publicly listed companies to map the trend of investment in South African prospecting activities. To expand the scope of this subject and acquire in-depth knowledge about the trend of investment in South African prospecting activities, medium and small- companies can be included in future studies.

REFERENCE LIST

Aquila Steel (South Africa) Pty Ltd vs South African Steel Company (Pty) Ltd, 2014. ZAGPPHC 14612/2013 (High Court of South Africa, Gauteng). [Online] Available at: www.saflii.org/za/cases/ZAGPPHC/2014/365.html [Accessed: 07 February 2020].

African Exploration Mining and Finance Corporation SOC Ltd, 2015. *Integrated Annual Report*. pp.55-56. [Online] Available at: https://www.aemfc.co.za/images/reports/2015-AEMFC-Audited-Annual-Report.pdf. [Accessed 11 May 2020].

African Exploration Mining and Finance Corporation SOC Ltd, 2016. *Integrated Annual Report*. pp. 52-56. [Online] Available at: https://www.aemfc.co.za/images/reports/2016-AEMFC-Audited-Annual-Report.pdf [Accessed 11 May 2020].

African Exploration Mining and Finance Corporation SOC Ltd, 2017. *Integrated Annual Report*. pp.52-56. [Online] Available at: https://www.aemfc.co.za/images/reports/2017-AEMFC-Audited-Annual-Report.pdf [Accessed 11 May 2020].

African Exploration Mining and Finance Corporation SOC Ltd, 2018. *Integrated Annual Report*. pp.50-60. [Online] Available at: https://www.aemfc.co.za/images/reports/2018-AEMFC-Audited-Annual-Report.pdf [Accessed 11 May 2020].

African Exploration Mining and Finance Corporation SOC Ltd, 2019. *Integrated Annual Report*. [Online] pp. 54-60. Available at: https://www.aemfc.co.za/images/reports/2019-AEMFC-Audited-Annual-Report.pdf [Accessed 11 May 2020].

Aquila Steel (South Africa) Pty Ltd vs Minister of Mineral Resources and others, 2019. ZACC 5 CCT08/18 (Constitutional Court of South Africa). [Online] Available at: www.saflii.org/za/cases/ZACC/2019/5.html [Accessed 07 February 2020]

Brannen, J., 2005. Mixing Methods: The Entry of Qualitative and Quantitative Approaches into the Research Process. *International Journal of Social Research Methodology*, 8(3), pp.173-184. [Online] Available at: http://dx.doi.org/10.1080/13645570500154642. [Accessed 20 July 200]

Bowen, G., 2009. Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9(2), pp.27-40. [Online] Available at: http://dx.doi.org/10.3316/QRJ0902027. [accessed 21 January 2019]

Bakan, I. & Dogan, I., 2012. Competitiveness of the Industries Based on the Porter's Diamond Model: An Empirical Study. [pdf] Kahramanmaras: Arpaeress, pp.441-447. [Online] Available at: https:/https://pdfs.semanticscholar.org/f535/de61b63980e01c26235a9df08c852ef45924.pdf./. [Accessed 20 June 2019].

Bengwenyama ya-Maswazi community vs Minister of Mineral Resources and others, 2014. ZACC 26 CCT39/10 (Constitutional Court of South Africa), p.1.

Bauba Resources Limited, 2015. *Integrated Annual Report*. [Online] pp.6-33. Available at: https://www.baubaresources.co.za/wp-content/uploads/2018/06/Bauba-Platinum-Integrated-Annual-Report-2015.pdf. [Accessed 25 May 2020].

Bushveld Minerals Limited, 2015. *Integrated Annual Report*. [Online] Available at: http://www.bushveldminerals.com/financial-reports/ [Accessed 27 May 2020].

Bauba Resources Limited, 2016. *Integrated Annual Report*. [Online] pp.35-49. Available at: https://www.baubaresources.co.za/wp-content/uploads/2018/06/Bauba-Platinum Integrated-Annual-Report-2016.pdf. [Accessed 25 May 2020].

Bushveld Minerals Limited, 2016. *Integrated Annual Report*. [Online] Available at: http://www.bushveldminerals.com/financial-reports/ [Accessed 27 May 2020].

Bauba Resources Limited, 2017. *Integrated Annual Report*. [Online] pp.30-49. Available at: https://www.baubaresources.co.za/wpcontent/uploads/2018/06/Bauba_Platinum_integrated_annual_report_2017.pdf [Accessed 25 May 2020].

Bushveld Minerals Limited, 2017. *Integrated Annual Report*. [Online] Available at: http://www.bushveldminerals.com/financial-reports/ [Accessed 27 May 2020]

Bauba Resources Limited, 2018. *Integrated Annual Report*. pp.30-52. [Online] Available online at: https://www.baubaresources.co.za/wp-content/uploads/2018/10/Bauba-Platinum-Limited-integrated-annual-report-2018.pdf [Accessed 25 May 2020].

Bushveld Minerals Limited, 2018. *Integrated Annual Report*. [Online] Available at: http://www.bushveldminerals.com/financial-reports/ [Accessed 27 May 2020]

Bauba Resources Limited, 2019. *Integrated Annual Report*. [Online] pp.20-40. Available at: https://www.baubaresources.co.za/wp-content/uploads/2019/12/Bauba-Resources-Limited-2019-IAR.pdf [Accessed 25 May 2020].

Bushveld Minerals Limited, 2019. *Integrated Annual Report*. [Online] Available at: http://www.bushveldminerals.com/financial-reports/ [Accessed 27 May 2020].

Coal of Africa (Pty) Ltd vs Akkerland Boerdery (Pty) Ltd*,* 2014. 38528/2012 (North Gauteng High Court Pretoria).

Department of Mineral and Energy, 1998. *A Minerals and Mining Policy for South Africa, White Paper*. Republic of South Africa: Government Gazette.

Diana, C., Sorin, M., Mirela, I., Laura, M. and Sabina, I., 2015. Creating Competitive Advantage in Coal Mining Industry in Romania: A New Challenge. *Procedia Economics and Finance*, 23, pp.428-433. [Online] Available at: https://core.ac.uk/download/pdf/81937211.pdf. [Accessed 5 January 2020

Department of Mineral Resources, 2015. *South African Mining Industry*. Republic of South Africa.

Department of Mineral Resources, 2017. *Annual Report*. Republic of South Africa. [Online] Available at:

https://www.gov.za/sites/default/files/gcis_document/201810/mineral-resources-annual-report-20172018.pdf [Accessed 25 June 2019].

De Trigueros, R., 2018. Research Objectives. A Guide to Write Research Objectives. [ebook] Salvador: University De El Salvador, pp.1-2. [Online] Available at: https://www.researchgate.net/publication/330171319 _RESEARCH_OBJECTIVES [Accessed 2 January 2021].

DRD Gold Limited, 2019. *Integrated Annual Report*. p.62. [Online] Available at: https://www.drdgold.com/investors-and-media/annual-reports/2015 [Accessed 02 June 2020].

Department of Mineral Resources and Energy, 2022. South Africa's Exploration Implementation Plan, s.l.: Government Gazette No. 46246.

Exchange Rates UK, 2022. Compare Live Foreign Currency Exchange Rate & History. [Online] Available at: https://www.exchangerates.org.uk/USD-ZAR-spot-exchange-rates-history-2016.html [Accessed: 20 November 2021].

Fugard, A. J.B. & Potts, H. W.W., 2015. Supporting thinking on sample sizes for thematic analyses: a quantitative tool, *International Journal of Social Research Methodology*, 18:6, 669-684. [Online] Available at: https://DOI:10.1080/13645579.2015.1005453

Garcia, J.M. & Camus J.P., 2011. Value creation in the resource business. *The Journal of the Southern African Institute of Mining and Metallurgy*, Volume 111, p 802. [Online] Available at: https://www.saimm.co.za/Journal/v111n11p801.pdf. [Accessed 20 February 2020]

Geoscience Australia, 2017. Australia's Identified Mineral Resources, p 1. [Online] Available at: http://www.ga.gov.au/data/assets/pdf_file/0005/58874/Australias-Identified-Mineral Resources-2017.pdf. [Accessed 19 May 2019]

Global Legal Group, 2019. International Comparative Legal Guide to Mining Laws, 2019. A practical cross-border insight into mining law, 6th ed. pp. 5-205. [Online] Available at: https://www.acc.com/sites/default/files/resources/vl/membersonly/Article/1490831_1.pdf [Accessed 16 July 2020].

Hoexter, C., 2018. Administrative Justice in Kenya: Learning from South Africa's Mistakes. *Journal of African Law*, Volume 62, 1 (2018), pp 105–128, University of London. [Online] Available at: https://doi.org/10.1017/S0021855318000025.

International Journal of Sales, Retailing and Marketing, 2016. *Research Methodology.* [Online] Available at: https://www.circleinternational.co.uk/wp-content/uploads/2021/01/IJSRM4-9.pdf#page=57. [Accessed 14 August 2022].

International Alliance on Natural Resources in Africa, 2016. African Mining and Mineral Policy Guide. African Union, pp 12-35. [Online] Available at: https://ianra.org/publications.html. [Accessed 10 June 2020].

Jara, J.J., Lagos, G. & Tilton, J.E., 2008, Using Exploration Expenditures to Assess the Climate for Mineral Investment. *Resources Policy,* Volume 33, pp 179-187. [Online] Available at: https://doi.org/10.1016/j.resourpol.2008.08.003.

Jinghuaa, S., Xinxina, M. & Nana, X., 2011. The Comparative Study on the Mining Industry Competitiveness of Xinjiang in China, pp 159-162. [Online] Available at: http://dx.doi.org/10.1016/j.egypro.2011.03.028. [Accessed 11 February 2020].

Jara, J.J., 2017. Determinants of Country Competitiveness in Attracting Mining Investments: An empirical analysis. *Resources Policy*, Volume 52. pp 65-71. [Online] Available at: http://dx.doi.org/10.1016/j.resourpol.2017.01.016. [Accessed 20 January 2020]

Khoo, E.M., 2005. Research questions and Research Objectives. University of Malaya. [Online] available at: https://www.researchgate.net/publication/236119434_Research_questions_and_research_objectives [Accessed 15 January 2020].

Kamaluddin, A. & Rahman, R., 2009. *Enhancing Organisation effectiveness through human, relational and structural capital an emprical analysis*. [ebook] Accounting Research Institute (ARI), p.02. [Online] Available at:

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiV4KygtsLyAhVUiFwKHYcMDBwQFnoECAIQAQ&url=http%3A%2F%2Fari.uitm.edu.my%2Fmain%2Fimages%2FMAR%2Fvol08-1%2Fchap1.pdf&usg=AOvVaw08oHEBtAwTzlyz1zqfnSAy. [Accessed 14 July 2021].

Lavrakas, P.J., 2008. Encyclopedia of survey research methods. 1st ed. [ebook] Los Angeles: Sage Publications, Inc.[Online] Available at: https://books.google.co.za/books?hl=en&lr=&id=Rhp1AwAAQBAJ&oi=fnd&pg=PP1&dq=pdf+Encyclopedia+of+survey+research+methods.+Sage+Publications,+Inc.,+Thousand+Oaks+2008&ots=NUJ3CXuFDe&sig=8YOV587P-0Uj2v_Xegt4P_hHzU#v=onepage&q&f=false [Accessed 22 February 2022].

Lupu, A.G., 2013. Models of Success for the Romanian Economic Organizations: New Characteristics of the National Competitive Advantage Mix, Oil & Gas University of Ploiesti, Faculty of Economics, Romania, pp 136-13. [Online] Available at: http://www.management.ase.ro/reveconomia/2013-1/10.pdf. [Accessed 10 August 2020]

LEXAfrica, 2019. LEX Africa Guide to Mining Regimes in Africa. LEXAfrica, pp.10-85. [Online] Available at: https://www.lexafrica.com/wp-content/uploads/2019/02/LEX-Africa-MINING-GUIDE-DIGITAL.pdf. [Accessed 17 June 2020].

Mtegha, H.D., Cawood F.T. & Minnitt, R.C.A., 2006. National minerals policies and stakeholder participation for broad-based development in the Southern African

development community. (SADC). *Resource Policy*, 31(231-238), pp 232-237. [Online] Available at: https://doi.org/10.1016/j.resourpol.2007.03.001 [Accessed 23 May 2019].

Meepo vs Kotze and others, 2007. Southern African Legal Information Institute. [Online] Available at: http://www.saflii.org/za/cases/ZANCHC/2007/47.html [accessed 16 February 2020].

Mawetse (South Africa) Mining and Corporation (Pty) Ltd vs Minister of Mineral Resources and others, 2015. Department of justice. [Online] Available at: http://www.justice.gov.za/sca/ judgments/sca 2017/sca2017-165.pdf [Accessed 10 March 2020]

Magnum Mining and Exploration Limited, 2015. *Integrated Annual Report*. [Online] Available at: http://www.mmel.com.au/site/news/annual-reports. [Accessed 30 May 2020]

Magnum Mining and Exploration Limited, 2016. *Integrated Annual Report*. [Online] Available at: http://www.mmel.com.au/site/news/annual-reports [Accessed 30 May 2020].

Magnum Mining and Exploration Limited, 2017. *Integrated Annual Report*. [Online] Available at: http://www.mmel.com.au/site/news/annual-reports [Accessed 01 June 2020].

Magnum Mining and Exploration Limited, 2018. *Integrated Annual Report*. [Online] Available at: http://www.mmel.com.au/site/news/annual-reports [accessed 15 June 2019].

Magnum Mining and Exploration Limited, 2019. *Integrated Annual Report*. [Online] Available at: http://www.mmel.com.au/site/news/annual-reports [Accessed 30 May 2020].

MC Mining Limited, 2015. *Integrated Annual Report*. [Online] Available at: http://www.mcmining.co.za/investors-and-media/annual-reports [Accessed 30 May 2020].

MC Mining Limited, 2016. *Integrated Annual Report*. [Online] Available at: http://www.mcmining.co.za/investors-and-media/annual-reports [Accessed 30 May 2020].

MC Mining Limited, 2017. *Integrated Annual Report*. [Online] Available at: http://www.mcmining.co.za/investors-and-media/annual-reports [Accessed 01 June 2020].

MC Mining Limited, 2018. *Integrated Annual Report*. [Online] Available at: http://www.mcmining.co.za/ investors -and-media/annual-reports [Accessed 30 May 2020].

MC Mining Limited, 2019. *Integrated Annual Report*. [Online] Available at: http://www.mcmining.co.za /investors-and-media/annual-reports [Accessed 30 May 2020].

Mineral Commodities Limited, 2015. *Integrated Annual Report*. [Online] Available at: https://www.mineralcommodities.com/investors-media/annual-reports/ [Accessed 01 June 2020].

Mineral Commodities Limited, 2016. *Integrated Annual Report*. [Online] Available at: https://www.mineralcommodities.com/investors-media/annual-reports/ [Accessed 01 June 2020].

Mineral Commodities Limited, 2017. *Integrated Annual Report*. [Online] Available at:

https://www.mineralcommodities.com/investors-media/annual-reports/ [Accessed 01 June 2020].

Mineral Commodities Limited, 2018. *Integrated Annual Report*. [Online] Available at: https://www.mineralcommodities.com/investors-media/annual-reports/ [Accessed 01 June 2020].

Mineral Commodities Limited, 2019. *Integrated Annual Report*. [Online] Available at: https://www.mineralcommodities.com/investors-media/annual-reports/ [Accessed 29 May 2020].

Malikane, C. & Chitambara, P., 2018. Foreign direct investment, productivity and the technology gap in African economies. *Journal of Africa Trade,* Volume 4 (2018), pp. 61-74. [Online] available at: https://doi.org/10.1016/j.joat.2017.11.001 [Accessed 15 June 2019.

Mineral Council South Africa, 2018. *Facts and Figures pocketbook*, pp 19-22. [online] Available at: https://www.mineralscouncil.org.za/industry-news/publications/ facts-and-figures. [Accessed 20 May 2019]

Mineral Council South Africa, 2017. *Facts and Figures pocketbook,* p 20. [Online] Available at: https://www.mineralscouncil.org.za/industry-news/publications/facts-and-figures [Accessed 28 May 2019].

Republic of South Africa, 2017. *National Environmental Management Act No. 107 of 1998*. Republic of South Africa, No.40772, 7 April 2017. pp 220-221, 231-235. Government Gazette.

Northam Platinum Limited, 2015. *Consolidated Integrated Annual Report*. [Online] Available at: https://www.northam.co.za/investors-and-media/publications/annual-reports [Accessed 01 June 2020].

Northam Platinum Limited, 2016. *Consolidated Integrated Annual Report*. [Online] Available at: https://www.northam.co.za/investors-and-media/publications/annual-reports [Accessed 01 June 2020].

Northam Platinum Limited, 2017. *Consolidated Integrated Annual Report*. [Online] Available at:

https://www.northam.co.za/investors-and-media/publications/annual-reports [Accessed 01 June 2020].

Northam Platinum Limited, 2018. *Consolidated Integrated Annual Report*. [Online] Available at: https://www.northam.co.za/investors-and-media/publications/annual-reports [Accessed 01 June 2020].

Northam Platinum Limited, 2019. *Consolidated Integrated Annual Report*. [Online] Available at: https://www.northam.co.za/investors-and-media/publications/annual-reports [Accessed 01 June 2020].

Otto, J. & Cordes J., 2002. *Regulation of mineral enterprises: Global Perspective on Economics Law and Policy*, United States of America, Rocky Mountain Mineral Law Foundation, p 55. [Online] Available at: https://www.worldcat.org/title/regulation-of-mineral-enterprises-a-global-perspective-on-economics-law-and-policy/oclc/454502929#borrow.

O' Leary, Z., 2014. *The essential guide to doing your research project*. 2nd ed. Thousand Oaks: CA: SAGE Publications.

Pan African Resources Limited, 2015. *Consolidated Integrated Annual Report.* [Online] Available at: https://www.panafricanresources.com/investors/financial-reports/ [Accessed 01 June 2020].

Pan African Resources Limited, 2016. *Consolidated Integrated Annual Report*. p119 [Online] Available at: https://www.panafricanresources.com/investors/financial-reports/ [accessed 01 June 2020].

Pan African Resources Limited, 2017. *Consolidated Integrated Annual Report*. [Online] Available at: https://www.panafricanresources.com/investors/financial-reports/ [Accessed 01 June 2020].

Pan African Resources Limited, 2018. *Consolidated Integrated Annual Report*. [Online] Available at: https://www.panafricanresources.com/investors/financial-reports/ [Accessed 01 June 2020].

Pan African Resources Limited, 2019. *Consolidated Integrated Annual Report.* [Online] Available: https://www.panafricanresources.com/investors/financial-reports/ [Accessed 01 June 2020]

Platinum Group Metals Limited, 2015. [Online] Available at http://www.platinumgroupmetals. net/investor-relations/financial-statements/default.aspx [accessed 01 June 2020].

Platinum Group Metals Limited, 2016. [Online] Available at http://www.platinumgroupmetals. net/investor-relations/financial-statements/default.aspx [01 June 2020].

Platinum Group Metals Limited, 2017. *Integrated Annual Report*. [Online] Available at: http://www.platinumgroupmetals.net/investor-relations/financial-statements/default.aspx [01 June 2020].

Platinum Group Metals Limited, 2018. *Integrated Annual Report*. [Online] Available at: http://www.platinumgroupmetals.net/investor-relations/financial-statements/default.aspx

Platinum Group Metals Limited, 2019. *Integrated Annual Report*. [Online] Available at: http://www.platinumgroupmetals.net/investor-relations/financial-statements/default.aspx

Republic of South Africa, 2002. *Mineral and Petroleum Resource Development Act No.28*. Republic of South Africa, No. 23922, 10 October 2002. Government Gazette.

Rand Gold and Exploration Company Limited, 2015. *Integrated Annual Report*. [Online] Available at: https://www.randgoldexp.co.za/wp-content/uploads/2018/09/2015Annual Report .pdf [Accessed 02 May 2020].

Parliamentary Monitoring Group, 2021. DMRE & DARDLR 2021/22 Annual Perfomance Plans; with Ministers, North West Province: Parliamentary Monitoring Group.

Rossouw, M. & Baxter, R., 2011. Subject concepts and issue outline. *The Journal of the Southern African Institute of Mining and Metallurgy,* Volume 111, pp. 511-512. [Online] Available at:

http://www.scielo.org.za/pdf/jsaimm/v111n7/a11v111n7.pdf.

Roopa, S. & Rani, M.S., 2012. Questionnaire Designing for a Survey. Journal of Indian Orthodontic Society, 46(4):37-41. [Online] Available at: http://www.Researchgate.net/publication/235801675Questionnaire_Designing_for_a_survey [Accessed 21 May 2020].

Rand Gold and Exploration Company Limited, 2016. *Integrated Annual Report*. [Online] Available at: https://www.randgoldexp.co.za/wp-content/uploads/2018/09/2016Annual Report .pdf [Accessed 02 May 2020].

Rand Gold and Exploration Company Limited, 2017. *Integrated Annual Report*. [Online] Available at: https://www.randgoldexp.co.za/wp-content/uploads/2018/09/ AnnualReport 2017.pdf [Accessed 02 May 2020].

Rand Gold and Exploration Company Limited, 2018. *Integrated Annual Report*. [Online] Available at: https://www.randgoldexp.co.za/2019/03/25/randgold-exploration-2018-annual-report/ [Accessed 02 May 2020].

Rand Gold and Exploration Company Limited, 2019. *Integrated Annual Report*. [Online] Available at: https://www.randgoldexp.co.za/2020/03/23/randgold- exploration-2019-annual-report/ [Accessed 02 May 2020].

Stainbank, L. & Peebles, C., 2006, "The usefulness of corporate annual reports in South Africa: perceptions of preparers and users", Meditari Accountancy Research, Vol. 14 No. 1, pp. 69-80. [Online] Available at: https://doi.org/10.1108/1022252920060

Saunders, M., Lewis, P. & Thornhill, A., 2009. Research *methods for business students*, 5th edn, Rotolito Lombarda, Italy. p 414. [Online] Available at: https://eclass.teicrete.gr/modules/document/file.php/DLH105/Research %20Methods %20for%20Business%20Students%2C%205th%20Edition.pdf. [Accessed 9 February 2020]

Samson, M., Katwyk, S., Fröling, M., Ndoro, R., Meintjes, C. & Renaud, B., 2015. Methods of Measuring the Impacts of Social Policy in Political, Economic and Social Dimensions. p2. [Online] available at: https://pdfs.semanticscholar.org/c413/93f2e2c988865f1517d50 af323f095c1deb0.pdf.

Shanduka Resources (Pty) Ltd vs Minister of Mineral Resources and others (2017) Southern African Legal Information Institute. [Online] Available at: http://www.saflii.org/za/cases/ ZAWCHC /2017/7.html.

Standard and Poor Global Market Intelligence, 2019. *World Exploration Trends 2018*. PDAC Special Edition. p.8. [online] Available at: https://www.spglobal.com/marketintelligence/en/documents/world-exploration-trends-march-2019.pdf [Accessed 27 August 2022].

South African Government, 2022. About Applying for prospecting Rights. [Online] Available at: http://www.gov.za
[Accessed 31 July 2022].

Tilton, J., 1992. Mineral endowment, public policy and competitiveness. *Resources Policy*, 18(4), pp.237-249.

The Frazer Institute, 2013. *British Columbia'S Mining Policy Performance: Improving BC'S Attractiveness to Mining Investment, Studies in Mining Policy*. Columbia: Frazer Institute, pp.1-31. [Online] Available at: https://www.fraserinstitute.org/sites/default/files/BC-mining-policy-performance.pdf?. [Accessed 25 May 2019].

Transhex Limited, 2015. *Integrated Annual Report*. [Online] Available at: https://www.transhex.co.za/wp-content/uploads/2015/06/Trans-Hex-Group_2015-Integrated-Annual-Report.pdf. [Accessed 03 June 2020].

Transhex Limited, 2016. *Integrated Annual Report*. [Online] Available at: https://www.transhex.co.za/wp-content/uploads/2016/06/2016-Trans-Hex-Group-Integrated-Annual-Report.pdf [Accessed 03 June 2020].

Transhex Limited, 2017. *Integrated Annual Report*. [Online] Available at: https://www.transhex.co.za/annual-reports/ [Accessed 03 June 2020].

Transhex Limited, 2018. *Integrated Annual Report*. [Online] available at: https://www.transhex.co.za/annual-reports/ [Accessed 03 June 2020].

Tilton, J. E., Guzman, J. I. & Juan, I., 2016. Mineral Economics and Policy. *Mineral Economics,* vol 30, pp. 116-117. [Online] Available at: https://doi.org/10.4324/9781315733708.

Tilton, J.E., Crowson, P., DeYoung, J., Eggert, R., Ericsson, M., Guzmán, J., Humphreys, D., Lagos, G., Maxwell, P., Radetzki, M., Singer, D. & Wellmer, F., 2018. Public policy and future mineral supplies. *Resources Policy*, 57, pp.55-60.

Transhex Limited, 2019. *Integrated Annual Report*. [Online] available at: https://www.transhex.co.za/annual-reports/ [Accessed 03 June 2020].

The Frazer Institute, 2019. *Annual survey of mining companies*. Frazer Institute, pp 7-10. [Online] Available at: https://www.fraserinstitute.org/sites/default/files/annual-survey-of-mining-companies-2018.pdf [Accessed 5 October 2019].

The Presidency South Africa, 2019. *Address by President Cyril Ramaphosa at the Investing African Mining Indaba, international Conference center, Cape Town.* [Online] Available at: www.thepresidency.gov.za/speeches/address-president-cyril-ramaphosa-investing-africanmining-indaba%2C-international-convention [Accessed 22 June 2019].

United Nations Conference on Trade and Development, 2011a. *World Investment Report, Overview non-equity modes of international production and development, United Nations Conference on Trade and Development,* Switzerland: UNCTAD. pp 10-14. [Online] Available at:

https://unctad.org/en/PublicationsLibrary/wir2011_en.pdf. [Accessed 25 February 2020]

United Nations Conference on Trade and Development, 2011b. Best Practices in Investment for Development How to Attract and Benefit from FDI in Mining: Lessons from Canada and Chile, *United Nations Conference on Trade and Development*, New York and Geneva: UNCTAD. p 88. [Online] Available at: https://unctad.org/system/files/official-document/diaepcb2010d11_en.pdf [Accessed 10 January 2020].

United Nations Conference on Trade Development, 2011. Best Practices in *Investment for Development Case Studies in FDI, how to Attract and Benefit from FDI in mining: lesson from Canada, United Nations Conference on Trade and Development*. [Online] Available at: https://unctad.org/en /publicationsLibrary/wir2011_en.pdf [Accessed 16 May 2019].

United Nations Economic Commission for Africa, 2014. A Country Mining Vision Guidebook: Domesticating the Africa Mining Vision [ebook] Addis Ababa: UNECA, pp.80-133. [Online] Available at: http://www.uneca.org/sites/default/files/PublicationFiles/country_miningvision_guidebook.pdf. [Accessed 11 October 2019].

Universal Coal Plc, 2015. *Integrated Annual Report*. pp 76-83. [Online] Available at: www.universalcoal.com [Accessed 02 June 2020].

Universal Coal Plc, 2016. *Integrated Annual Report*. pp 74-80. [Online] Available at: www.universalcoal.com [Accessed 02 June 2020].

United Nation Environment Programme, 2017. *Tools to evaluate the effectiveness of policy instruments for the implementation of the strategic plan for biodiversity 2011-2020*, s.l.: United Nations Environment Programme, p4.

Universal Coal Plc, 2017. *Integrated Annual Report*. pp 77-80. [Online] Available at: www.universalcoal.com [Accessed 02 June 2020].

Universal Coal Plc, 2018. *Integrated Annual Report*. [Online] pp 76-80, Available at: www.universalcoal.com [Accessed 02 June 2020].

Universal Coal Plc, 2019*. Integrated Annual Report*. pp 74-80. [Online] Available at: www.universalcoal.com [Accessed 02 June 2020].

World Economic Forum, 2011. The Global Competitiveness Report, Geneva, Switzerland: World Economic Forum. pp 3-10. [Online] Available at: http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf. [Accessed 16 February 2020]

Wang, C. & Han, F., 2012. Analysis on Investment Environment of Mining Industry in China. Procedia Environmental Sciences, 12(2012), pp. 243-251. [Online] Available at: https://cyberleninka.org/article/n/430925.pdf. [Accessed 11 May 2020].

Wang, J.Q., 2012. Financing the Mining Industry in China. *The Chinese economy*, 45(2012), pp. 76-78., [online] available at: https://doi.org/10.2753/CES1097-1475450305 [Accessed May 2019].

Wasenaar, D. R. & Mamotte, N., 2012. *Ethical Issues and Ethics Reviews in Social Science Research*. [Online] Available at https://books.google.co.za/books?hl=en&lr=&id=vZZpAgAAQBAJ&oi=fnd&pg=PA268&dq=info:RoxRPHMKXJEJ:scholar.google.com/&ots= 626kkgGoKm&sig=dQU4v617NWDuxk5FI0N1-bpxIO8#v=onepage&q&f=true. [Accessed 10 May 2020].

Wrighton, C.E., Been, E.J. & Mankelo, J.M., 2014. The development and implementation of mineral safeguarding policies at national and local levels in the United Kingdom. *Resources Policy*, 41 (2014), pp. 161-165. [Online] available at: DOI: 10.1016/j.resourpol.2014.05.006.

Wesizwe Limited, 2015. *Integrated Annual Report.* [Online] available at: https://www.wesizwe.co.za /investors-annual-reports.php [Accessed 02 June 2020].

Wesizwe Limited, 2016. *Integrated Annual Report*. [Online] available at: https://www.wesizwe.co.za /investors-annual-reports.php [Accessed 02 June 2020].

Wesizwe Limited, 2017. *Integrated Annual Report.* [Online] available at: https://www.wesizwe.co.za /investors-annual-reports.php [Accessed 02 June 2020].

Wesizwe Limited, 2019. *Integrated Annual Report*. [Online] available at: https://www.wesizwe.co.za /investors-annual-reports.php [Accessed 02 June 2020].

Wesizwe Limited, 2019. *Integrated Annual Report*. [Online] available at: https://www.wesizwe.co.za /investors-annual-reports.php [Accessed 02 June 2020].

World Bank Group, 2020. A decade after the global recession: Lessons and challenges for emerging and developing economies, Washington, DC: World Bank. [Online] Available at: https://documents1.worldbank.org/curated/en/331901574315985584/pdf/A-Decade-After-the-Global-Recession-Lessons-and-Challenges-for-Emerging-and-Developing-Economies.pdf [Accessed 25 February 2022]

Wankhade, M., Rao, A.C.S. & Kulkarni, C., 2022. *A survey on sentiment analysis methods, applications, and challenges*. [ebook] Dhanbad: Springer. [online] Available at: https://doi.org/10.1007/s10462-022-10144-1 [Accessed 25 July 2022].

APPENDIX A

Example of the Questionnaire used in the survey

Q1 Do you give consent for your responses to be used in the research project?

Q 2. What challenges relating to the Sections of the acts or regulatory obstacles below have you encountered when applying for Prospecting Right(s) or during the period of holding a Prospecting Right in South Africa? If you never had challenges, just indicate- None.

Q 2.i. MPRDA Section 16(1)(a)(b)- Application process and Application fee.

Q 2. ii. MPRDA Section 17 (1)(a)- Proof of technical and financial ability.

Q 2.iii. MPRDA Section 18 (1) & (2)- Requirements for lodging prospecting right renewal.

Q 2. iv. MPRDA Section 19 (2)(a)(b)(c)(d) (f) & (g)- Obligations of a prospecting right holder.

Q 2.v. MPRDA Section 5(4)(c)- Consultation with landowners by the investor or applicant.

Q 2.vi. MPRDA Section 2(b)- Acceptance of an application.

Q 2.vii. MPRDA Section 9(1)- Handling of application received on the same day.

Q 2. viii. MPRDA Section 19(2)(b)- Commencement of prospecting activities after the right are issued

Q 2.ix MPRDA Section 10(1)- Advertisement notices of acceptance of prospecting right applications by DMR.

Q 2.x. MPRDA Section 2(d) and Mining Charter- Black Economic Empowerment requirement for prospecting rights.

Q 2. xi. MPRDA Section 96(1)- Handling of appeal by DMR, when aggrieved as an investor.

Q 2. xiii. LUPO Section 14- Application for land use rights (land zoning and administrative processes)

Q 3. Is the South African investment climate favorable for you to invest in prospecting?

Q 4. List any other challenges you have encountered in the process of applying for Prospecting Rights.