

AFRICA UNIVERSITY
(A United-Methodist Related Institution)

THE RIGHT TO MINERALS AS A TOOL FOR LIVELIHOODS DEVELOPMENT
IN CHAKARI, ZIMBABWE

BY

MICHAEL WASHAYA

A DISSERTATION SUBMITTED IN PARTIAL FULLFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER IN HUMAN RIGHTS,
PEACE AND DEVELOPMENT IN THE COLLECE OF BUSINESS, PEACE,
LEADERSHIP AND GOVERNANCE

2017

Abstract

The research was premised on the nexus between mining and mining activities vis-à-vis livelihood development in Chikari, a mining village located some 36km from the city of Kadoma which is predominantly a farming community that is also rich in gold deposits. It also sought to assess the bearing that other mining related activities have on people and their livelihoods. The study intended to dissect and analyse the current government mineral policy and other mining related policies' impact on people's livelihoods. This research hence sought to augment available literature by dissecting the various variables of economic development, however zeroing on livelihood development. The research was informed by the property rights theory which focuses rights to use, to earn income from, and to transfer or exchange the assets and resources, formed and enforced by political entities. Primary and secondary, qualitative and quantitative data collection methods were utilised in the process of gathering data. The research made use of a case study and such quantitative and qualitative methods like questionnaires, documentary search and interviews among others were also used as data collection methodologies. Non-probability sampling techniques such as purposive or judgemental sampling were utilised in order to select relevant respondents in the process of research. Data was analysed using thematic analysis. Results from the field of research reveal that the majority of the people in Chakari who are engaged in mining activities do not have legal mining rights. Due to the absence of these mining rights, the people who do not have mining claims are highly mobile and practice artisanal mining methods. Even though they can sufficiently cater for their families' needs and wants, owing to the stability of gold prices, their livelihoods remain vulnerable and under threat as they always face imminent arrest anytime due to the illegality of their operations. Therefore, there is need for a holistic review of the Mines and Mineral Act of Zimbabwe in particular its tariff and fees regime which need to be pro-poor and opencast mining on all prime agricultural land must be outlawed. Administratively, the Mines offices should be decentralized to district levels and sub-offices should be established at service centers as a way of limiting travelling hustles and easing of access to services

Key words: mineral rights, livelihood, property rights

Declaration

This dissertation is my own original work except where sources have been acknowledged. The work has never been submitted, nor will it ever be submitted, to another University in the awarding of any degree

.....

Student's Full Name

Student's Signature (Date)

.....

Main Supervisor's Full Name

Main Supervisor's Signature (Date)

Copyright

No part of this dissertation may be reproduced, stored in any retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise for scholarly purpose without the prior written permission of the author or of Africa University on behalf of the author.

Acknowledgements

I wish to acknowledge the assistance received from the following people who made it possible for this document to be put together.

My supervisor, Dr. S Mungure, who tirelessly guided me in conducting and compiling the entire research project, my wife, Blandina Washaya and my two children and friends who gave, me the encouragement and patiently put up with the difficulties and frustrations faced in getting the work done.

I also want to express my gratitude to Mr P Meza, Mr N Pinduka, Government of Zimbabwe authorities, the Chakari community and its leadership for their patience and assistance. To all I want to say, most sincerely, thank you!

Dedication

This research is dedicated to my late mother, Mabel Washaya, my wife Blandina and my two sons, Munashe and Panashe.

Abbreviations and Acronyms

| | |
|---------|--|
| UDHR | Universal Declaration of Human Rights |
| CLEP-UN | Commission on the Legal Empowerment of the Poor |
| GDP | Gross Domestic Product |
| MDGs | Millennium Development Goals |
| UNICEF | United Nations International Children's Emergency Fund |
| WB | World Bank |
| ZIMVAC | Zimbabwe Vulnerability Assessment Committee |
| FPL | Food Poverty Line |
| FAO | Food and Agriculture Organisation |
| ASMs | Small Private Artisanal Mines |
| RDC | Rural District Council |
| MMA | Mines and Minerals Act |
| EMA | Environmental Management Agency |

Table of Contents

| | |
|---|------|
| Abstract | ii |
| Declaration | iii |
| Copyright | iv |
| Acknowledgements | v |
| Dedication | vi |
| Abbreviations and Acronyms | vii |
| Table of Contents | viii |
| List of Tables | xi |
| List of Figures | xii |
| List of Appendices | xiii |
| CHAPTER 1: INTRODUCTION | 1 |
| 1.1 Introduction | 1 |
| 1.2 Background to the study | 2 |
| 1.3 Statement of the problem | 4 |
| 1.4 Purpose of study | 5 |
| 1.5 Significance of study | 5 |
| 1.6 Research objectives | 6 |
| 1.7 Research questions | 6 |
| 1.8 Assumptions | 6 |
| 1.9 Delimitations | 7 |
| 1.10 Limitations | 7 |
| 1.11 Definitions of terms | 8 |
| 1.12 Conclusion | 9 |
| CHAPTER 2: REVIEW OF RELATED LITERATURE | 10 |
| 2.1 Introduction | 10 |
| 2.2 Property rights | 11 |
| 2.2.1 An Overview of Mineral Rights under the Auspices of Property Rights | 13 |
| 2.3 Livelihoods Development and the Sustainable Livelihood Approach | 15 |
| 2.3.1 The Nexus between Livelihood development and Human Security | 17 |

| | |
|---|----|
| 2.4 Examining the Interconnection between Mineral Rights (property rights) and Livelihood Development | 19 |
| 2.5 Mining and Rural Livelihood Development | 21 |
| 2.6 An Overview of Mining in Zimbabwe..... | 24 |
| 2.6.1 A Historiographical Synopsis of Mining in Zimbabwe | 24 |
| 2.6.2 The Significance of Zimbabwe’s mining Industry | 26 |
| 2.6.3 Structure of Gold Mining Industry in Zimbabwe | 28 |
| 2.6.4 An Analysis of Small scale and Artisanal mining | 29 |
| 2.7 Legal and Institutional Framework | 31 |
| 2.8 Theoretical Framework | 36 |
| 2.9 Summary | 42 |
| CHAPTER 3: METHODOLOGY | 43 |
| 3.1 Introduction | 43 |
| 3.2 Research design | 44 |
| 3.3 Population | 44 |
| 3.4 Sampling Procedure | 46 |
| 3.5 Data Collection Instruments | 47 |
| 3.6 Data analysis procedures..... | 49 |
| 3.7 Data collection plan | 49 |
| 3.8 Ethical considerations | 50 |
| 3.9 Conclusion | 50 |
| CHAPTER 4: DATA PRESENTATION, ANALYSIS AND INTERPRETATION | 51 |
| 4.1 Introduction..... | 51 |
| 4.2 Characterisation of Gold Mining Rights in Chakari | 52 |
| 4.2.1 Full Mining Rights Holders | 52 |
| 4.3 Tribute Agreements vis-à-vis Mineral Rights in Chakari..... | 54 |
| 4.4 None-mineral Rights Holders and the Extraction of Gold in Chakari..... | 58 |
| 4.5 An Analysis of Mining and Livelihoods in Chakari Village | 60 |
| 4.5.3 Mining Related Income Generating Activities and Livelihoods | 66 |
| 4.6 The Impact of Mining on Farmers and their livelihoods | 75 |
| 4.7 The Role of Politics in the Mining Industry | 83 |

| | |
|---|----|
| 4.8 Summary | 84 |
| CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS | 86 |
| 5.1 Introduction | 86 |
| 5.2 Summary | 86 |
| 5.3 Conclusions and Emerging Issues | 88 |
| 5.4 Recommendations | 89 |
| References | 92 |
| APPENDICES | 96 |

List of Tables

| | |
|---|----|
| Table 1: Annual growth rate of industries in Zimbabwe | 27 |
| Table 2: Target sample and key informants..... | 45 |
| Table 3: Assets acquired by artisanal miners..... | 64 |
| Table 4: Mining and livelihood development in Chakari | 70 |

List of Figures

| | |
|---|----|
| Figure 1: Distribution of gold deposits in Zimbabwe | 28 |
|---|----|

List of Appendices

| | |
|---|-----|
| Appendix 1: Interview guides | 96 |
| Appendix 2: AUREC approval letter | 102 |

CHAPTER 1: INTRODUCTION

1.1 Introduction

Property rights, as the legal ownership of specific possessions by individuals and the ability to determine how such possessions are used have remained important in state governance internationally. . The significance of right to property as a human right is well articulated in various international human rights instruments. The 1948 Universal Declaration of Human Rights (UDHR) for instance in Article 17 declares that, “Everyone has the right to own property alone as well as in association with others. No one shall be arbitrarily deprived of his property.” Although, property rights, particularly mineral rights have been a contentious, convoluted and intricate subject in various developing countries endowed with minerals, their relevance to the human securitisation of communities and individuals is too critical to ignore. The Report of the Commission on the Legal Empowerment of the Poor (CLEP-UN 2008:16) for instance outlines that, “Property rights help to establish clear ties of rights, obligations, responsibilities and recognition in a community. They are often the basis on which people establish their legal identity, exercise voting rights or access basic services like electricity. These basic opportunities can be a powerful means to climb out of poverty”. Against such a background, the study sought to investigate the nexus between mineral rights and livelihoods development in remote rural areas, zeroing on Chakari Mining Village in Zimbabwe.

1.2 Background to the study

Mining has long been an important industry in Zimbabwe. The earliest iron smelting sites have

been dated to the second century AD and the first mention of gold from the east coast of Africa is made by Arab geographers in the tenth century and in the sixteenth century, the Portuguese traded gold from the mines of *Munhumutapa* in present day Zimbabwe (Maponga, 1993). Today Zimbabwe mines over 40 minerals of which gold is the most important (ibid). Other principal minerals produced in 1992 (by value) were nickel, asbestos, coal, copper, chromite, iron ore, tin, limestone and phosphate rock. The colonisation of Africa by Europe in the 1880s left a legacy of poverty and underdevelopment of native African communities who were deprived of their land which was their main means of production. Settler colonies had a worse record for poverty reduction especially considering the mineral resources of South Africa and Southern Rhodesia (Austin, 2010). Natives were not allowed to own any mine claim but were rather reduced to providers of labour in those mines. Most of the areas where minerals were extracted were left undeveloped save for a few gravel roads that led to the mines.

Studies relating to the relationship between property rights and livelihoods have shown that there is a strong relationship between the two as propounded by SARD (Policy Brief Number 9, 2009) which contends that land distribution and tenure security directly affect the 900 million poor people who live in rural areas and the 2.5 billion rural people who depend on agriculture and natural resources for their livelihoods. SARD (ibid:ii) has also noted that, “Governance and natural resource management reforms in the

colonial and post-colonial eras weakened customary institutions and systems, creating a gap at the local level which has escalated conflicts and that the “historical injustices” of land expropriation, resettlement and grabbing continue to reduce the economic, social and political opportunities of the poor”. According to Carpano *et al* (2008), Africa has been hit the hardest with an overall negative GDP growth of 1.1 percent between 1980 and 2000 and an increase in poverty between 1990 and 2000.

Chakari is a mining village which is situated approximately thirty eight kilometers (38km) from Kadoma city in Mashonaland West Province. The village grew up around the former Turquoise Gold mine of 1907. The village was also named Turquoise village by the colonial settlers before the name was changed to Shagari in 1911 and eventually changed to the current name, Chakari in 1923. Turquoise mine was later renamed Dalny mine which became one of the country’s best gold producers until its closures in 2013. Parliament of Zimbabwe (2012) notes that Chakari’s livelihood is mainly dependent on farming and illegal mining which has resulted in the cost of living becoming expensive for many people. Nhambura (2015) adds that like most rural areas in Zimbabwe, Chakari has been severely hit by economic challenges. Company closures and climate change have made life difficult for the people of Chakari. Poor rains coupled with low farming products producer prices also makes farming in Chakari an unattractive enterprise placing gold mining at the core of Chakari’s economy.

It is against this backdrop that property rights and livelihoods development have a symbiotic relationship as is expressly expounded by Carpano *et al* (2008:7) who observe that, “Property rights to land, livestock and other agrarian resources are critical to the

livelihoods of rural men, women and children. Insecure property rights perpetuate gender inequalities, livelihood insecurity and poverty. Thus, secure property rights are central to any effort to address poverty and vulnerability for the full achievement of the Millennium Development Goals (MDGs)”

1.3 Statement of the problem

While, Chikari is endowed with various minerals especially gold deposits, the community’s livelihoods have been a cause for concern in the post-independent Zimbabwe. The community continues to be characterised by negative economic and infrastructure development, high unemployment levels, illegal mining, poor economic security and poverty stricken families. The failure by the community to access mineral rights has witnessed the widespread illegal gold panning in the area, occasioning poor extraction of minerals in the area. The community has thus continued to languish in poverty as noted by the Zimbabwe statistics 2015. ZIMSTAT (2015) with assistance from, and in collaboration with United Nations International Children's Emergency Fund (UNICEF) and the World Bank, for instance embarked on a poverty mapping exercise to produce the Zimbabwe Poverty Atlas using the 2012 National Population Census data.

The results which were compiled by Zimbabwe Vulnerability Assessment Committee (ZIMVAC:2014) indicated that poverty was wide spread in the wards located in rural districts while wards located in urban districts had lower incidences of poverty across Zimbabwe. According to the ZIMVAC data, Sanyati District where Chakari is located, had a prevalence of 64.3%. Wards in the north east area (including ward 1 and 2) had high poverty prevalence rates ranging from 73% to 84% while wards in the central and

south east areas were in the 61% to 71% poverty prevalence rates, (ibid). In recent years, food production in Zimbabwe has been devastated by various factors including natural disasters, and economic and political instability. Rural areas and communities have been the hard hit and Chakari is not an exception as income sources are limited. The illegal mining which is at the epicenter of the economy in the community is failing to properly sustain members of the community. Access to mineral rights within communities in Zimbabwe has been affected by high license prices and reluctance of villagers to embark on formal commercial mining. Therefore, despite the availability of minerals in Chakari, people's livelihoods are still a cause for concern as the extraction of minerals has not yielded positive results for the Chakari Community.

1.4 Purpose of study

The research aimed to investigate mining implications on people's livelihoods. It also sought to assess the bearing that other mining related activities have on people and their livelihoods. The study intended to dissect and analyse the current government mineral policy and other mining related policies' impact on people's livelihoods.

1.5 Significance of study

The study sought to inform and assist the government of Zimbabwe in formulating policies that empower local communities using resources found in their localities. Chakari is one of the richest places in Zimbabwe in terms of gold deposits and yet its peoples are some of the poorest and least developed in the country. This research was therefore be an eye opener to the government of Zimbabwe on the importance of relying on local resources for local development especially considering the hash economic

environment that Zimbabwe is currently facing where Foreign Direct Investment is grossly limited. The research was also insightful to the Chakari community on legal ways of mining gold as well as on how they can partner the government and other stakeholders in coming up with productive mining ventures.

1.6 Research objectives

The objectives of the research were:

- a) To investigate relationships between mining rights and livelihoods development.
- b) To assess the significance of gold mining to the people of Chakaris' livelihood development.
- c) To assess the contribution of policy regimes on mining and livelihoods

1.7 Research questions

In order to zero in on the research objectives the following questions were used.

- a) What are the conditions required for acquisition of mineral rights?
- b) How significant is gold mining to the livelihoods of Chakari communities?
- c) How has the current mining policy contributed to livelihoods development of the people of Chakari?

1.8 Assumptions

The research assumed that local people were not fully benefiting from natural resources that are found in their area especially minerals and more specifically gold. The researcher also assumed that the people from Chakari had not fully benefited from the

yellow metal albeit its abundance and that the government did not full commit itself in ensuring such. The researcher also assumed that granting mineral rights to the local people of Chakari could be the panacea to illicit illegal mining, poverty and underdevelopment.

1.9 Delimitations

Wards 1 and 2 in Chakari under Sanyati Rural District Council was the focus of attention for this study chiefly because these wards were considered the hub of economic activities in Chakari. Most villages, mines and farming activities are concentrated in these two wards. Villages that were taken into consideration included Glassgow, Alabama, Turkoise, Patchway, Bluegrass and Despite the possibility of availability of different kinds of minerals in Chakari as well as different manifestations of property regimes, gold was used as a reference mineral and property from which the study was centered on chiefly because of its abundance and impact on the livelihoods of the people in Chakari. The Mines and Minerals Act (1963) was also considered to be the foremost mining policy governing all mining related activities in Zimbabwe with all other related policies playing an auxiliary role. The research was centered on the livelihoods of the black people domiciled in Chakari.

1.10 Limitations

Some of the targeted groups like the artisanal miners were reluctant to participate fearing that they could be arrested. This would was overcame by diplomacy though liaison with opinion leaders of the community who played a crucial role of convincing the participants. The area of study was also dominated by beneficiaries of the land reform

who were sometimes unreceptive to the researcher suspecting that he could be driving anti-government agenda. This was overcome by seeking authority from relevant political stakeholders. Some respondents did not understand some concepts prompting the researcher to come in and explain resulting in their responses heavily dependent on the researcher's own understanding. Some concepts were also difficult to translate into vernacular resulting in an adulterated meaning of those concepts. There was not much background data available on the research area leading to researcher relying on newspaper articles and oral information which sometimes was unscientific. Some of the key informants lacked in-depth knowledge of issues and could not back some of their claims with empirical evidence and statistics.

1.11 Definitions of terms

Economic Empowerment- It is granting a group of people means to be in control of their own economic destiny. It consists of helping people improve their economic status, while at the same time, gaining more control over that status (E-notes).

- **Poverty** means not having an income or consumption sufficient to support specific normative functioning. It is generally defined as a state of being poor (UNDP).
- **Food Poverty Line (FPL) or Lower Line** represents the minimum consumption expenditure necessary to ensure that each household member can (if all expenditures were devoted to food) consume a minimum food basket representing 2100 calories per day (UNDP).
- **Extreme poverty** represents households whose per capita consumption expenditure falls below the FPL or the lower poverty line (UNDP).

- **Indigenization**- it is the act of making something more native, transformation of some activity, service or idea to suit a local culture, especially through the involvement of more people in administration, employment etcetera (Wikipedia). It describes what happens when locals take something from the outside and make it theirs.
- **Livelihood**- A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base. (Chambers & Conway, 1991)

1.12 Conclusion

The chapter dealt with most important issues of the study especially the reasons why the study was carried out, what it intended to achieve as well as limitations encountered.

CHAPTER 2: REVIEW OF RELATED LITERATURE

2.1 Introduction

Mineral rights as property rights involve the legal ownership of minerals on a piece of real estate. Mineral rights have been vital in the human securitisation of people especially on livelihood development. Livelihood development involves a set of activities, involving securing water, food, fodder, medicine, shelter, clothing and the capacity to acquire above necessities working either individually or as a group by using endowments. The nexus between mineral rights and livelihood development is vital as the former facilitates that latter. However, various socio-economic and political factors affect access of minerals by rural communities deleterious affecting their livelihoods. In the Zimbabwe context, the extraction of minerals has been taking place since the pre-colonial period. Extraction of minerals in the post-colonial period has been vital for Zimbabwe and it is guided by various institutional frameworks. Theoretically, the property rights theory which informs this study focuses on how legislation by nation-

states affect access of minerals by various communities negatively affecting economic growth and people's livelihoods.

2.2 Property rights

According to Besley and Maitreesh (2010) the term property right refers to an owner's right to use a good or asset for consumption and or income generation referred to as "use rights" and it can also include the right to transfer it to another party, in the form of a sale, gift, or bequest, referred to as "transfer rights". In this way Acemoglu (2003) states that a property right also typically conveys the right to contract with other parties by renting, pledging, or mortgaging a good or asset, or by allowing other parties to use it, for example, in an employment relationship Gist (2015) on the same notes states that property rights refer to the theoretical and legal ownership of specific property by individuals and the ability to determine how such property is used. Hinojosa (2006) in Fisher (1923:27) writes that a property right is 'the liberty of permit (under the sanction and protection of custom and law) to enjoy benefits of wealth in its broadest sense, while assuming the costs which those benefits entail. Therefore, a property right is a bundle of rights entailing a set of entitlements as well as a set of obligations. Commenting on the issue of property rights, Chikomo (2016) is of the view that property rights are a human right generally understood as being a privilege which is inherent to the human being. Accordingly property rights just like any human right are thus naturally bestowed on every individual by virtue of belonging to the human race.

Anderson (1990) and Gist (2015) both concur that the term property rights is extensive. Thus, for Anderson (1990), property rights consist of multiple characteristics often

referred to by lawyers as a bundle of sticks, each of which represents a different aspect of property ownership that include the right to use (and so to profit from) an asset, the right to exclude others from using the asset, and the right to transfer the asset to other. On the same note Gist (2015) articulates that in most developed countries, for example, the rights of property ownership can be extended by using patents and copyrights to protect scarce physical resources (such as houses, cars, books, shoes, land, tire irons or cellphones), non-human creatures (such as dogs, cats, horses or birds) and even some intellectual property (such as inventions, ideas or words).

Again, on the expansive nature of property rights, North (1990), Pejovich (1997), Hinojosa (2006) and Mathieu (2007) all agree that three vital elements are imminent in property rights and these are exclusivity of ownership, transferability of ownership and constitutional guarantees of ownership/institutional frameworks such legal rule. Pejovich (2001) goes further to state that according to the Roman law tradition, which dominates current legal institutional frameworks, property rights in the 21st century is threefold namely, private ownership, communal ownership, and state ownership. The scholar, however, points out that the adoption of one or another type would depend upon the time and effort needed for establishing and enforcing the selected option, and the relative scarcity of the resource in question. North (1990) writing on property writes states that property rights differ and vary hence this study will focus on mineral rights as a variable of property rights.

2.2.1 An Overview of Mineral Rights under the Auspices of Property Rights

Mineral rights are generally defined by Jameson (2004) as property rights to exploit an area for the minerals it harbors. Snyder (2015), states that a mineral right is a right to extract a mineral from the earth or to receive payment in the form of royalty, for the extraction of minerals. In this way the Courthouse Direct Project. (2005) connotes that the term mineral rights refers to the legal ownership of minerals on (or technically under) a piece of real estate. Snyder (2015) goes further to explain that the term mineral must not be parochially interpreted to refer to rubies.

Gates (2016) supports such a view by stating that the term minerals can refer to almost anything of value that exists under the ground, meaning that it include rocks and ore such as coal, iron, gold or precious stones; but it more commonly involves oil or natural gas. The South African Minerals Act cited in Van der Vyver (2012:14) afforded to the concept of mineral a broad meaning to include “any substance, whether in solid, liquid or gaseous form, occurring naturally in or on the earth, in or under water or in tailings and have been formed by or subjected to a geological process, excluding water, but including sand, stone, rock, gravel and clay, as well as soil, other than top soil”. Therefore, mineral rights ownership refers to who owns the rights to extract minerals that is, oil, gas, gold, coal and other metals and minerals from lands located in that country.

The Courthouse Direct Project 2005) on the same note states that mineral as a term may have different meanings depending on the context, and there is no universal definition but ownership is very important, since the rights confer considerable potential for profit from the extraction of these minerals. Consequently, Snyder (2015) reiterates that in

virtually all countries around the world, the owner of the surface land, be it a house or farmland has absolutely no rights with regards to mineral ownership. Thus, in most countries central governments or monarchs own such rights, for instance in the United Kingdom, the Queen in theory owns all the rights to extract minerals from all lands in the country, including those lands located offshore. In practice, of course, this ownership is actually governed by the central government, (ibid). However in the USA, just like in South Africa, the owner of the surface land can also have the rights to extract minerals from underneath that land if proper channels are followed.

The granting of a right to explore and mine minerals could be obtained in various ways, (Van der Vyver, 2012; The Courthouse Direct Project, 2005). In the South Africa context for instance, the owner of the land could apply for a certificate of rights to minerals in respect of the land of which he or she was the owner, or mineral rights could be ceded to a third person through the registration of a notarial deed registered against the title deed of the land, or a certificate could be issued to the third person authorising that third person to explore and to mine, (Van der Vyver, 2012). Therefore, because of such flexibility in the mineral rights in states like the USA private individuals own much of the mineral rights across the USA, as opposed to governmental or state organizations. It should however, be emphasized that mineral rights are distinct from surface rights, or the right to the use of the surface of the land for residential, agricultural, recreational, commercial, or other purposes as mineral rights may be sold or retained separately from the surface rights, in which case the mineral rights are said to be severed, (Courthouse Direct Project, 2005). This henceforth entails that there mineral rights are twofold, that is the unified and split rights.

2.3 Livelihoods Development and the Sustainable Livelihood Approach

Nester (2007) states that the term livelihood development is a multi-faceted term that requires a separation of livelihood and development for better understanding. Thus, Emerald (2008) in this way states that person's livelihood refers to their means of securing the basic necessities. It thus is the human securitization of the individual. Kofi Annan cited in Kondo and Makanza (2014:35) states that, in its broadest the concept of human security embraced far more than the absence of violent conflicts, it encompasses human rights good governance, access to education and health care and ensuring that each individual has opportunities and choices to fulfill his or her own potential.

Thus, for Nester (2007) the basic necessities are food, water, shelter and clothing which are vital for life. Livelihood henceforth encompasses a set of undertakings, involving securing water, food, fodder, medicine, shelter, clothing and the capacity to acquire above necessities working either individually or as a group by using endowments (both human and material) for meeting the requirements of the self and his/her household on a sustainable basis with dignity (Emerald, 2008). On the other hand development is a process, in which someone or something grows or changes and becomes more advanced (Nester, 2007). Therefore, livelihood development involves the advancement of activities that involves securing basic necessities. Commenting on livelihood development Shivai (2017) stipulates that livelihood development is designed to help improve the quality of life of marginalised and excluded people, providing them with access to basic human rights, for example health care; three meals a day; education;

clean drinking water and sanitation inter alia offering training and skills to ensure the livelihood which has been learnt has impact for a life time, for a community and for the future. Livelihood development is henceforth the securitization of individuals within a community.

The study also adopted the concept of sustainable livelihood in order to unravel the research problem. According to Krantz (2001), the concept of Sustainable Livelihood (SL) is an attempt to go beyond the conventional definitions and approaches to poverty eradication. McNamara (at al), 2009 identifies a multi capital approach where livelihoods sustainability is considered in terms of five principal assets which are natural, human social, physical and financial capitals important to livelihoods development. This is the same approach that the researcher used in this study with the main focus being on the natural asset which is gold. According to DIFID, a livelihood is sustainable when it can cope with and recover from shocks and stresses and maintain and enhance its capabilities and assets both now and in the future, whilst not undermining the natural resource base. It was noted that apart from developing these livelihoods, there was need to sustain them hence the adoption of the sustainable livelihood concept in this study. In the case of Chakari, proper mining methods were found to be critical in sustaining the mining industry and consequently sustaining the peoples' livelihoods as opposed to the artisanal methods of mining which destroys the life of the mines and peoples 'future livelihoods. Illegal mining methods concentrate on extraction of alluvial gold deposits and this poses a threat to the sustainability of livelihoods of those illegal miners once surface gold deposits are depleted hence the importance of the concept of sustainable livelihood to the study.

2.3.1 The Nexus between Livelihood development and Human Security

There is a strong relationship between livelihood development and human security in the sense that the former leads to enhancement of the latter. The 1994 UNDP report defines human security as people's threats from chronic threats and protection from sudden hurtful disruptions in patterns of life. These are thus occasioned by poor or lack of livelihood development activities. In this way Keller (2010:2) asserts that the notion of human security grows from the assumption that there are needs, problems and issues that are common to all mankind no matter what part of the world they live. Abeyrathne (2008) hence states that livelihood development programs are designed to help improve the quality of life for marginalized people by providing them with access to health care, livelihood opportunity and protection; thereby giving them hope to constructively contribute to their communities.

Such sentiments are related to the views of Kondo and Makanza (2014:35) who denote that, an essential part of human security approach is its focus on inter-linkages between the multiple threats and issues such as socio-economic deprivation, health, education, the environmental issues and physical threats and violent conflicts. This thus, entails that the elements of human security are intertwined such that deprivation of one element possess a threat to the other elements for instance if economic insecurity leads to health insecurity and insecurity in the political spheres is a threat to personal freedom. Therefore, depriving a community of livelihood development perils human security. Abele (2014) commenting on phenomenon of colonialism states that conquest of

African countries by European Superpowers brought about different forms of domination and exploitation of the colonized denying them participation in high economic activities thereby periling the advancement of their means to livelihood, consequently leading to human insecurity of the persons concerned. It is fundamental to note that the scope of human security includes seven areas which are economic security, food security, health security, environmental security, personal security, community security and political security (Archarya, 2011).

Livelihood development henceforth focuses on security human security. Affecting the former henceforth deleteriously presents conundrums to the latter. Livelihood activities are vital in that they ensure economic security which is an assured basic income for individuals, usually from productive and remunerative work or in the last resort from some publicly financed safety net. Kondo and Makanza (2014:75) state that individual securitization is hollow unless it is livelihood activities Thus, lack of a means of support and regular income determines a person's livelihood security The fundamentality of livelihood development in the economic security of individuals is greatly in revealed in the Afghanistan-US context in which US Counter terrorism strategies that the country employed in 2001 after the 9/11 attacks affected Afghanistan severely, (Edwards, 2012). Thus the US Counter terrorism strategies like airstrikes and massive bombardments have damaged fertile lands making it unproductive for agriculture. This has henceforth periled livelihood activities putting a halt to livelihood development and in turn affecting human security of Afghans. On the same note Kondo and Makanza (2014:15) denote that violations of human rights in Africa which renowned globally affects livelihood development, in turn affecting human security hence African continent is characterized

by a mosaic of progress, regressive, retarded and stagnant states. Thus, there is a great relationship between livelihood development and human security.

2.4 Examining the Interconnection between Mineral Rights (property rights) and Livelihood Development

A mineral right as a right to extract a mineral from the earth or to receive payment in the form of royalty, for the extraction of minerals, (Snyder, 2015) is fundamental livelihood development not only of developing states but within rural areas of developing countries as well. Thus, SARD (2007) points out that access to and control *inter alia* the management of natural resources, especially land, is a key determinant of income, power, status and rural livelihoods. Lu And Lora-Wainwright (2006) supports such a view by not that mining has played a crucial role in national development since the founding of the People's Republic of China in 1949 as the revolution of the mining sector to state-owned mines to the establishment of township and village mines were established alongside a growing number of relatively small private artisanal mines (ASMs) occasioned the industrialization of modern China. In this way FAO (2007) underscores the importance of property rights in livelihood development by alluding to the fact that property rights to land, livestock and other agrarian resources are critical to the livelihoods of rural men, women and children and that insecure property rights perpetuate gender inequalities, livelihood insecurity and poverty.

Thus, according to FAO (ibid) secure property rights are central to any effort to address gender inequalities, poverty, vulnerability and sustainable development in general. Citing the case study of Peru Bury (2005), states that many existing mining operations

have been transferred to private firms through the sale of state-owned interests, which has significantly altered the ownership and distribution of mineral extraction activities throughout the country. Ministry of Energy and Mines, (2001) on the Peru case notes that in 1990 private operations accounted for 55% of mineral production throughout the country, whereas in 1999 private operations accounted for 95% of mineral production. The effect of such a transition and sale including the transference of mineral rights from the central government to private players has witnessed transformation of the livelihood of citizens of Cajamarca, a city in Peru's northern highlands, in the Andes Mountains, (Burry 2005). The city has been characterized by increased access to roads, seed banks, irrigation extensions, latrines, potable water systems, money from land transactions, employment, rural credit programs, livestock supplies, markets for dairy products, human positive Increased access to formal education, technical training, health services, preventative health care, sanitation making it an important commercial center in the northern Andes (Lu And Lora-Wainwright, 2006).

The importance of property rights as a key to sustainable economic in the contest of mineral rights and human development is well articulated by O' Driscoll and Hoskins (2003) who argue that prosperity and property rights are inextricably linked. However, some scholars note that mineral rights within certain communities do not necessarily improve people's livelihoods, hence Lu And Lora-Wainwright (2006) note that Qiancun, a rural area in China's has been affected by as the ability of the local community to survive has been weakened by damage caused by mining activities which undercut possibilities for livelihood diversification and by a ban on small-scale mining which prevents villagers from benefiting in any significant way while they continue to

suffer its effects. Such sentiments on the effect of mineral rights on communities that have minerals have been documented by various scholars internationally (Abele, 2014).

Commenting on Africa societies and mineral Beglin (2007) states that Africa has not benefited substantially from its mineral wealth for instance Congo DR has witnessed severe diamond conflicts, where mineral rights have been violated and the mineral looted to other countries including European Countries. The same scholar also states that Equatorial Guinea, Angola and Nigeria Liberia's oil, and Zambia's copper has not been African communities but the minerals are being extracted. On the same note Wallace (2014) notes that Africa is the most impoverished continent, yet its sits on precious minerals because of poor government policies where mineral rights remain a vision for Africans and this has affected their access to basic necessities in the process. Therefore, in as much as mineral rights are fundamental in livelihood development but studies around the world reveal that granting such rights produce either positive or negative results to communities concerned.

2.5 Mining and Rural Livelihood Development

Adjei (2007) notes in his study on the impact of mining in rural Ghana that mining companies despite providing employment to rural communities, they actually deprive them of their entire livelihood activity through appropriation of their agricultural lands for the establishment of mines bringing their entire livelihoods to worse conditions. Establishment of foreign mining companies also forces local people to look for alternative lands for agriculture and in some cases they rent land for exorbitant prices.

Therefore, owing to chemical pollution of soil by the operations of the mines, local farmers' experiences unattractive yields and financial losses while big mining companies continue to thrive. Shortage of food due to decreased yields often leads to high cost of living in rural areas, (ibid). However, this can only be mitigated if the locals become owners of the mines themselves. On the other hand, Ontoyin and Agyemang (2014) examined the environmental impact of small-scale mining and its implication on rural livelihoods of Yale, Digari and Datuko in the Talensi-Nabdam districts of northern Ghana. The authors in this way state that agriculture is the dominant source livelihood of the three communities adding that crop farming, livestock rearing and fishing are the main sectors of agriculture affected by small-scale mining activities. This has been as a result of death of livestock due to chemical poisoning, theft of animals by miners, unproductive farming lands and low farm labor productivity.

Lu And Lora-Wainwright (2006) in their study of the impact of lead mining on sustainable livelihoods in rural central China, noted that current investors often employ outsiders, leaving villagers with meagre employment opportunities in the mines, limited livelihoods alternatives and severe environmental costs. Their research concluded that, ultimately the ability of local community to survive has been weakened by damage caused by all previous mining activities (which undercut possibilities of livelihood diversification) and by a ban on small scale mining (which prevents villagers benefiting in any way while they continue to suffer its effects). On the same note Chikuni (2009) in examining gold panning and its role within sustainable rural livelihoods in Mutasa district, Zimbabwe, revealed that gold panning plays a very crucial role within sustainable rural livelihoods in the district. The scholar further notes that has noted that

through gold panning, people have been able to acquire various assets such as cattle, houses and land. However, the author points out that despite the role played by gold panning within rural sustainable livelihoods, it has resulted in various adverse environmental effects such as deforestation, river siltation and death of animals as a result of mismanagement.

Bury (2004) in his assessment of the impact of gold mining by a Transnational company, Mineral Yamacocha on the livelihoods of people from Cajamarca Region in Peru, came to the conclusion that mining operations have impacted both positively and negatively on their livelihoods. In this region, livelihoods activities include agricultural production, agro-forestry, livestock production, salaried labor, dairy production, migration and artisanal production of ceramics and textiles. Positively as a result of rapid expansion of Mineral Yamacocha's mining operations, access to economic and human resources changed significantly from limited or no access to increased access to roads, rural credit programs, seed banks, irrigation extensions, latrines, portable water systems, employment, livestock supplies and markets for dairy products. Bury further noted that there was also a notable increase in access to formal education technical training, healthy services, preventative health care and sanitation. However, on a negative note, the impact of mining operations resulted in the decrease in access to natural resources such as irrigation water supplies, land resources for livestock and agriculture, water quality and quality of land (due to erosion intensification). Socially there was a notable decline in the quality and access to inter-household relationships, local conflict resolution mechanisms, community organizations and leadership. Lahiri-Dutt, Alexander *et al* (2014) in their study of informal tin mining and livelihoods of Lao

DPR, South East Asia, pointed to the fact that informal mining in Laos offered a livelihood opportunity: to diversify livelihoods and to take advantage of rising global prices of minerals. Their studies also show that as villagers became more entrenched in informal tin mining, they in adversely eroded their former livelihoods.

Therefore, available literature reveal the anatomy of the concepts of mineral rights under property rights, livelihood development inter alia the relationship between mining and livelihood development. However, there is a literature gap on the impact of mineral rights as a tool for livelihood development. Consequently, this research seeks to cover such a literature gap by ascertaining the nexus between mineral rights and livelihood development, zeroing on the case of Chakari Village, in Mashonaland West Province, in Kadoma.

2.6 An Overview of Mining in Zimbabwe

The following section aims at giving a historiographical overview of mining in Zimbabwe, including an examination of some of the legal frameworks that govern the extraction of mining in Zimbabwe. It also focuses on unpacking the importance of the mining in the Zimbabwean context.

2.6.1 A Historiographical Synopsis of Mining in Zimbabwe

In the pre-colonial epoch, the potential of the country for gold was known from numerous sources, including the reports of Portuguese missionaries who were active at the court of the *Munhumutapa* in the 17th century (Hollaway, 1997). Thus, historians generally agree that the *Munhumutapa* kingdom in the pre-colonial era had its economy anchored on trade with the Portuguese and that gold was at the center of that trade,

(ibid). The *Munhumutapa* mined and supplied gold to the Portuguese who themselves would supply the kingdom with clothes and guns. This trade did not only result in the development of livelihoods of the *Munhumutapa* people but also fortified the kingdom as a result of better and sophisticated weapons acquired from gold trade especially with the Portuguese.

Thus, a Keppel-Jones (2008) state that, there is historical evidence pointing out that gold mining was practiced by indigenous peoples in Zimbabwe before the advent of colonialization. Accordingly it thus was the Rudd Concession which gave Cecil John Rhodes exclusive rights over all metals and minerals in Zimbabwe. Hollaway (1997) in the same vein states that by the time the immense riches of the Witwatersrand were found in 1886, European prospectors and miners had already penetrated into modern-day Zimbabwe and had confirmed the ancient stories of a country of plentiful reef gold. It therefore, is vital to consider that Zimbabwe has been one of the most mineral rich countries since time immemorial. Hollaway (1997) and Keppel-Jones (2008) hence concur that inhabitants of the region now called Zimbabwe were active miners, mining as an economic activity unequivocally and obliquely contributed significantly to their livelihoods. Various historians correspond that of all the minerals that could be found in Zimbabwe, gold was the most popular, the most extracted as well as the most traded, (Chivaura, 2006). In this way early international trade between the Portuguese and the *Munhumutapa* as enunciated by historians suggest that gold was vital in the livelihoods of the *Munhumutapa* people as it expanded their choices to other goods and services that they could not produce locally, (ibid).

2.6.2 The Significance of Zimbabwe's mining Industry

Hawkins is of the view that (2009) is of the view that by global standards, Zimbabwe is not a mineral-rich economy, but it does possess resources, especially of platinum, gold, diamonds, methane gas, asbestos, nickel, coal and chromite, sufficient to generate export earnings in the region of US\$2 billion annually over the medium term and upwards of \$5 billion a year within 15 years, thereby ensuring that mining remains comfortably the country's largest exporter. World Bank (2016) projects that the value of minerals to increase from about US\$2.1 billion to about US\$ 8 billion by 2018 and the mining sector is constituting, 15% of nominal GDP, 58% of the total National exports, 13% of fiscal revenue, more than 45000 employment jobs and more than 50% foreign direct investment (Segula, 2013).

Thus, according to Mhembe (2015), the mining sector has to date been the most dynamic sector of the Zimbabwean economy, leading the 2009-2011 rebound with average annualised growth of 35%. Gold however, remains the largest contributor of all mineral export earnings and the strategic nature of gold is illustrated by Matimba (2015) who contends that, "the gold industry remains important in the socioeconomic development of the country through its contribution to export earnings, government revenue and employment, among other contributions, (ibid). It is the largest contributor to mineral export earnings at around 40%". The preceding makes the mining industry in general and gold mining in particular the heartbeat of Zimbabwe's economy as well as making it an important player in the development of peoples' livelihoods. Maponga (1993) henceforth contends that the bulk of Zimbabwe's gold comes from large-scale producers with the major gold producing companies in Zimbabwe being Lonrho (from

How, Arcturus, Athens, Shamva, Muriel, Tiger Reef, Redwing, Anzac mines), Falcon Gold (from Dalny, Venice, Old Nic, Dawn, What Cheer mines), Cluff Resources (from Freda-Rebecca, and Peach Tree mines), Falconbridge (from Blanket, and Golden Kopje mines), Union Carbide (from Gaika and Lennox mines) and Riozim (from Renco, the largest underground gold mine in Zimbabwe, Patchway, Brompton, and Cam and Motor mines. This thus, makes Zimbabwe one of the wealthiest countries in terms of gold deposits across Africa.

Table 1: Annual growth rate of industries in Zimbabwe

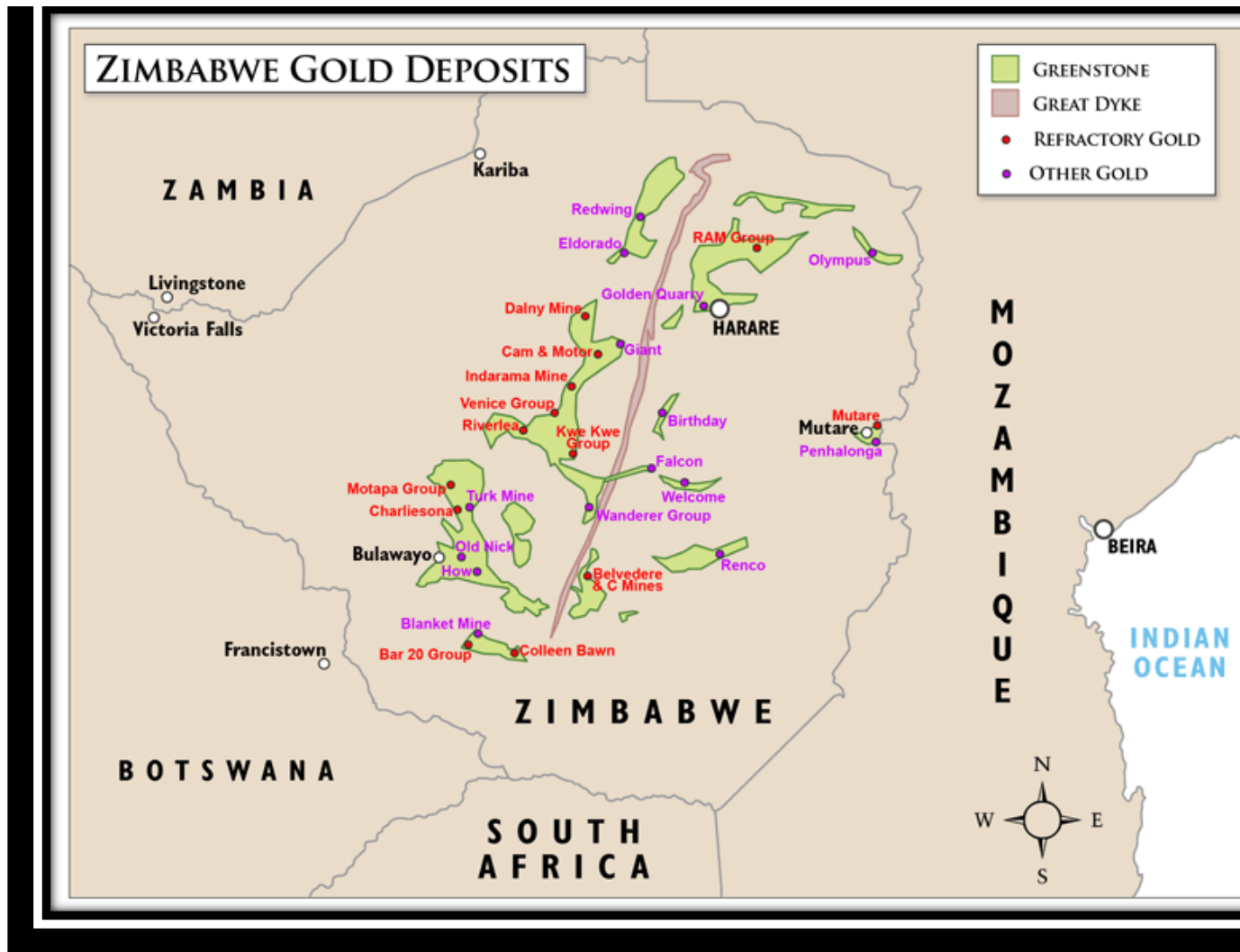
| <u>Industry</u> | <u>Average Annual Growth Rate</u> | | | |
|-------------------------|-----------------------------------|---------|---------|---------|
| <u>Projected</u> | | | | |
| | 1988-98 | 1999-08 | 2009-11 | 2012-15 |
| Mining and Quarrying | 2.2 | -9.5 | 34.8 | 19.2 |
| Construction | 0.3 | -16.0 | 2.4 | 2.7 |
| Gas, electricity, Water | 0.8 | -0.4 | 1.5 | 2.7 |
| Services | 3.7 | -0.5 | 2.0 | 5.9 |
| Agriculture | 3.9 | -11.6 | 12.9 | 1.4 |
| Manufacturing | 1.9 | -8.7 | 2.3 | 4.3 |

Source: Alex Mhembere, ZIMPLATS Chairman

2.6.3 Structure of Gold Mining Industry in Zimbabwe

There are three (3) broad categories of producers namely large scale primary producers, small scale and artisanal producers and secondary producers - by-product largely from PGMs (Matimba ibid).

Figure 1: Distribution of gold deposits in Zimbabwe



Source: Zimbabwe Geological Survey

2.6.4 An Analysis of Small scale and Artisanal mining

According to Afroekonomics (2016) small scale mining can refer to small legal mining operations, mining co-operatives and artisanal/informal mining and that artisanal/informal mining sector is largely made up of unregistered alluvial gold panning and gold diggers in or around Zimbabwe's main rivers. Thus PACT (2015) reiterates that in Zimbabwe, it is estimated that artisanal and small-scale mining (ASM) provides a direct livelihood for more than one million people critical in a country grappling with high unemployment and consensus is growing among key ASM stakeholders that the

government's policy shift toward increasing economic emphasis on ASM gold creates both an immediate need and an important opportunity to formalize the ASM sector. In the same vein, Chikuni (2009) estimates that the number of people deriving their livelihood from artisanal mining in Zimbabwe could well over 2 million if account is taken of people who provide support services to panners (for example transport, food and other services, and also due to that fact that the average family size in Zimbabwe is about 5 people. ASM sector's important contribution to the country's economy and employment cannot be ignored and in fact without this sector the country's mining industry would almost crumble. Thus Afrokonomics (2016) henceforth asserts that the contributed small scale gold mining to the overall amount of gold produced in Zimbabwe is unclear. However, recent estimates put the amount at roughly 25% of the total and that the President of the Zimbabwe Artisanal and Small scale for Sustainable mining council (ZASMC). Murove (2016) believes that the small scale miners are capable of increasing their contribution to 50%. Therefore, despite the significant contributions that ASM have on the total gold output, this sector remains largely unsupported by the current mining laws of Zimbabwe. Consequently, PACT (2015:16) notes that,

Zimbabwe's legal and policy framework for mining is generally burdensome, with more than 40 acts of parliament regulating mining operations. ASM is directly affected by 24 of these acts and by the statutory instruments that fall under them. The principal regulatory act is the Mines and Minerals Act (MMA), specifically Chapter 21:05m, which neither recognizes ASM nor differentiates between LSM and small-scale mining (SSM). The MMA's silence on ASM puts those engaged in it at a disadvantage; these individuals not only lack LSM's levels of financial and technical resources but also are ill-informed on the mining law's various requirements.

2.7 Legal and Institutional Framework

2.7.1 Mining policy of Zimbabwe

Zimbabwe's original mineral policies were based on an assumption that gold in quantity to rival the Witwatersrand would be found there. This led to a situation where it was easy to obtain mineral title but very difficult to create a mine appropriate to the modest scale of the resources actually found (Hollaway, 1997). The starting point in the acquisition of mining rights in Zimbabwe is to obtain a prospecting licence which entitles the holder to prospect, peg and register claims in terms of the Mines and Minerals Act. A prospecting licence can be issued as an Ordinary or Exclusive prospecting licence. A prospecting licence is valid for a renewable period of five years. An exclusive prospecting order confers exclusive rights to prospect for specified minerals in any identified location within Zimbabwe. Exclusive prospective orders are issued for a maximum of six years, and upon expiry of the said six years, it may be renewed for a period of three years.

Normally, mining rights in Zimbabwe are held in the form of a mining claim which is a permit to mine or extract minerals within an approved geographical area. A single claim will normally cover a very small area so it is common for mining firms to have several contiguous claims grouped into a block of mining claims. A block of mining claims can be transformed into a mining lease through an application made in terms of the Act. Generally, a mining lease confers long term rights which are renewable in terms of the Act. In terms of transferability basically, no mining rights may be transferred without the prior approval of the Minister of Mines and Mining Development.

There is no provision of any law in Zimbabwe permitting the State to have free carry rights or options to acquire shareholding. This is an issue that is regulated by the Agreement between the Government of the Republic of Zimbabwe and the potential investor. The current legislation does not provide for reconnaissance rights. With regards to exploration, the rights are not transferable without the prior approval of the Minister of Mines and Mineral Development. Technically, mining rights can be mortgaged to raise finance. However, the legislation makes it cumbersome to transfer mineral rights for instance thereby making it difficult to mortgage mineral rights for the purposes of raising finance.

The Mines and Minerals Act provides a wide range of rights or entitlements to a holder of mining or exploration rights to use the surface of the land. According to the said Act, a holder of Mining or exploration rights can enter the land to which such right relates, bring his or her employees onto the land, bring any plant, machinery or equipment, or build, construct or lay down any surface, underground or undersea infrastructure which may be required for the purposes of mining exploration. The holder may prospect or mine for his own account, use water in relation to prospecting or mining activities; and carry out any other activity related to exploration or mining. Basically, the holder of mining rights can remove and dispose of such mineral in accordance with the law.

A holder of a prospecting right or mining right does not have to purchase land from, or enter into an agreement to use the land with, the surface owner. However, pursuant to section 71 of the Constitution of the Republic of Zimbabwe, a holder of an exploration right or mining right has a duty towards the landowner or lawful occupier in terms of consultation, and the holder of a prospecting right or mining right has to compensate the

landowner for loss or damage suffered as a result of the conduct of prospecting or mining activities. Further, section 80 of the Mines and Minerals Act provides that any owner or occupier of reserved ground who is injuriously affected by the exercise of any rights under an authority or order granted under this Part or by any mining operation on any mining location registered under such order shall be entitled to recover compensation from the person to whom the authority was granted or in whose favour the order was made or the holder of the mining location, as the case may be, in such amount as may be agreed upon or, failing such agreement, as shall be determined by the Administrative Court.

Section 71 of the Constitution of Zimbabwe enshrines the right to protection of private property. No person in Zimbabwe may be compulsorily deprived of their property except where the deprivation is in terms of a law of general application or where the deprivation is necessary for the interests of defence, public safety, public order, public morality, public health or town and country planning or in order to develop or use that or any other property for a purpose beneficial to the community. Where it is intended to expropriate private property on any of the grounds above the law requires the acquiring authority to give reasonable notice of the intention to acquire the property to everyone whose interest or right in the property would be affected by the acquisition, to pay fair and adequate compensation for the acquisition before acquiring the property or within a reasonable time after the acquisition and, if the acquisition is contested, to apply to a competent court before acquiring the property, or not later than thirty days after the acquisition, for an order confirming the acquisition. This should be done in accordance

with section 82 of the Mines and Minerals Act. (Source: International Comparative Legal Guides, 2017)

Other important mining regulations are;

1 The Mining (Healthy and Sanitation) Regulations, 1977

2 The Mining (Management and Safety) Regulations, 1990

3 The Mining (Alluvial Gold) (Public Streams) Regulations, 1991

2.7.2 Environmental Management Act

Before commencing all mining operations, an Environmental Impact Assessment Certificate must be obtained from the Environmental Management Authority. The Certificate is issued after the satisfactory conduct of an Environmental Impact Assessment by the Environmental Management Agency of Zimbabwe. The assessment entails consideration of the Environmental Impact Assessment Report prepared by or on behalf of the holder of the mining location, site visits by Environmental Management Authority personnel and the conduct of public consultations where all interested stakeholders state their attitude to the proposed mining activity. Where the assessment is satisfactory, and upon payment of the licence fees, the Environmental Management Agency will issue a certificate of compliance which will enable the mining rights holder to commence operations.

In addition to the Environmental Impact Assessment Certificate, the holder of a mining location is also required to obtain, and maintain, the following environmental licences and authorisations:

- Effluent Discharge Licence issued by the Environmental Management Authority in terms of the Environmental Management Act [*Chapter 20:27*].
- Emission Licence issued by the Environmental Management Authority in terms of the Environmental Management Act [*Chapter 20:27*].
- Waste Disposal Licence issued by the Environmental Management Authority in terms of the Environmental Management Act [*Chapter 20:27*].
- Compliance with directives and guidelines relating to the importation of toxic and hazardous chemicals and materials issued by the Environmental Management Authority Board from time to time in accordance with Environmental Management Act [*Chapter 20:27*], as read with applicable Regulations.
- Compliance with directives and guidelines relating to storage, transportation and handling of hazardous chemicals and materials issued by the Environmental Management Authority Board from time to time in accordance with Environmental Management Act [*Chapter 20:27*], as read with applicable Regulations.

2.7.3 Indigenization and Economic Empowerment Act of Zimbabwe (2007)

The Act provides measures for the indigenization of the economy as well support measures for the economic empowerment of indigenous people of Zimbabwe. The main thrust of the Act is to ensure that indigenous Zimbabweans own at least fifty percent of shares of every public company and any other business. Section 3(1) of the Indigenization and Economic Empowerment Act [*Chapter 14:33*] records government's

objective of ensuring that at least 51% (controlling shareholding) of voting shares in prescribed businesses is owned by Indigenous Zimbabweans. In order to give effect to this objective, section 3 of the Indigenization and Economic Empowerment Act, as read with section 9 of the Indigenization and Economic Empowerment Regulations, obliges promoters of proposed projects to comply with the requirement for a controlling interest in such mining projects to be reserved for indigenous Zimbabweans. The indigenization legislation also prescribes that no merger or corporate restructuring exercise or acquisition of a controlling interest which is notifiable under the Competition Act [Chapter 14:28], or demerger or unbundling of any business, or relinquishment of control in any business shall be approved unless a controlling interest or, such lesser share as may be prescribed by the Minister from time to time, is held or reserved for Indigenous Zimbabweans. The reservation of a controlling stake for indigenous Zimbabweans is a *condictio sine qua non* to issuance of an Investment License by the Zimbabwe Investment Authority. For purpose of the Indigenization and Economic Empowerment Act, [Chapter 14:17] state that;

Indigenous Zimbabwean” is defined to mean “any person who, before the 18th April, 1980, was disadvantaged by unfair discrimination on the grounds of his or her race, and any descendant of such person, and includes any company, association, syndicate or partnership of which indigenous Zimbabweans form the majority of the members or hold the controlling interest.

2.8 Theoretical Framework

Various theories have been put forward to explain how events unfold in nation states. This research which aims at examining the nexus between minerals rights and

livelihoods development in Chakari, Zimbabwe is informed by the Property Rights Theory.

2.8.1 Property Rights Theory

This research is broadly informed by the tenets of the Property rights theories. According to Kim and Mahoney (2005) the stream of property rights literature that began with the earlier classical works of Coase (1959, 1960), Alchian (1965,1969), Demsetz (1964, 1966, 1967), Alchian and Demsetz (1972, 1973), Cheung (1968, 1969, 1970),and Furubotn and Pejovich (1972, 1973, 1974) among others. On the same note Kreps (1990) state that modern property rights thinkers include North (1981, 1990), Barzel (1982, 1997), Cheung (1983), Libecap (1989), Eggertsson (1990), and Alston *et al.* (1996), among others. Social Theorists share different views on property rights. Plato (*Republic*, 462b-c) on one argued that the collective ownership of property was necessary to promote common pursuit of the common interest, and to avoid the social divisiveness that would occur when some grieve exceedingly and others rejoice at the same happenings. On the same Hobbes and Hume cited in Libecap (1989) argued that there is no natural ‘mine’ or ‘thine,’ and that property must be understood as the creation of the sovereign state. Therefore, for the two theorists property must be collectively owned and the state should hold sovereign power. However, for Locke property could have been instituted in a state of nature without any special conventions or political decision, (ibid).

Proponents of the property right theory states property rights are the rights of individuals to the use of resources supported by the force of etiquette, social custom, ostracism, and formal legally enacted laws supported by the states’ power of violence or punishment

(Alchian, 1965). Property rights thus rights granted to individuals within a community but under formal legislation that is enforced by state apparatus. Property rights theories six-fold however with commonality (Alston *et al*, 1996). Therefore while the efficiency theory for instance focuses the laws being existent to protect property and to give people enforceable expectations of using good, the occupation theory is based on the premise that he who seizes the land property owns it, (Reich 2006). On the same note the labor theory as one of the property rights theories holds that whoever labors to create property should own it whereas the natural rights theory being deeply rooted in the works of Aristotle holds that the right to own property is a natural right, (ibid). Lastly the legal theory states that private property is whatever the law recognizes as property and the social utility theory states that society allows private property because doing so benefits the social welfare.

One of the well-known proponents of property rights theory, Libecap, (1989) states that property rights are the rights to use, to earn income from, and to transfer or exchange the assets and resources and formed and enforced by political entities. In the context of Chakari, though citizens own various places at which they reside, it is the Government of Zimbabwe through the Ministry of Mines that award mineral rights as a form of property right to potential miners. Thus, Falcon Gold for instance has the right to use of the land above the mineral, extraction including the use and transfer of gold, however the proper stipulated channels by the Government of Zimbabwe. It is vital to note that Hongoris (2009) citing Libecap (1989) connotes that property rights, are the social institutions that define or delimit the range of privileges granted to individuals to specific resources, such as parcels of land or water. In this way property rights thus

entail the right to exclude non-owners from access, the right to appropriate the stream of economic rents; and right to sell or otherwise transfer the resource to others. In Chakari, small scale miners and major mining companies like Falcon Gold Company have demonstrated the applicability of such tenets of the property rights theory by engaging security guards who sanction those are “excluded from accessing gold that these companies have rights to” and the right to transfer the resources to others as there are allegations of Falcon Gold intending to sale the now defunct Dalny Mine to Rio-Tinto.

Property rights theorists argue that property rights are made in an environment that is permeated with politics thereby leading deleteriously affecting economic growth. North (1990) for instance abandons the efficiency view of institutions which is he himself promoted in the 1970s, and argues that rulers devise property rights in their own economic interests and that positive transaction costs result in the persistence of inefficient property rights. Thus, property rights accordingly never produced positive results. This can contextualized in the case of Chakari, where mining legislation of Zimbabwe has not benefited villagers in the area which is impoverished as reported by ZIMVAC data which stated over half of the villagers languish in poverty because of the lack of proper livelihood activities. The extraction of minerals in the area is benefiting the top political brass; instead of the villagers in the area. The coercive power of the state has been employed throughout most of history in ways that have stymied economic growth.

Meyer (2007) citing North (1990) states that enforcement in the third world economies is uncertain not only because of ambiguity of legal doctrine (a measurement cost) but also because of uncertainty with respect to the behavior of the judicial system. In the

Zimbabwean context, Matyszak (2014) observed that the defining characteristic of Zimbabwe's indigenization policy which guides obliquely guides mineral rights has been the wide disjuncture between the law (as it is), government pronouncements of the law (as they would like the public to believe it to be) and the policy in practice. The legal framework governing this re-distributive policy in Zimbabwe is vague, defective, porous, and contradictory and at the same time misconstrued upon implementation leading to implementation challenges and non-transformation of the economy. Thus, the different interpretations of such legal frameworks leave residents in rural communities like Chakari in doldrums affecting their livelihood development as they are not able to access the right to minerals. The community in Chakari may be interested in formalizing their mining but because of inconsistency legislation and unbearable licence application procedures, they are unable to access mineral rights, which not only affects effective extraction of minerals but livelihood development of members of the community. North (1990) however, states that contrasting the institutional framework in countries such as the United States, England, France, Germany and Japan with Third World countries makes clear that the institutional framework is the critical success factor of economies both cross-sectionally and through time. This is so, because institutional framework shapes the direction of the acquisition of knowledge and capabilities, and that direction will be the decisive factor for the long-run development of that society, (ibid). Thus, though such mining policies or legal frameworks like the Mining (Healthy and Sanitation) Regulations, 1977; the Mining (Management and Safety) Regulations, 1990 and the Mining (Alluvial Gold) (Public Streams) Regulations of 1991 exist, Zimbabwe has not been able to rip positive results from mining because of poor implementation of institutional frameworks. Therefore, though mineral rights are enshrined in various

institutional frameworks, access to them by the general populace remains a conundrum, which thus affects the human development element. The Chakari community is backward yet institutional frameworks inter alia enforcement institutions governing minerals rights exist. As argued by North (1990) institutional framework shape the direction of acquisition of knowledge which is vital not only for economic development, but for human securitization and livelihood development as well. However, just like in any other Third World country as argued by Property Rights Theorists like North, institutional frameworks have not been clear and have been poorly implemented occasioning a continuous vicious circle of poverty in rural areas like Chakari in Zimbabwe.

According to North (1990) the coercive power of the state has been employed throughout most of history in ways that have stymied economic growth. Thus, although legal frameworks governing property rights exist, the state has used condign power which has deleteriously affected growth. The scholar goes further to state that property rights and economic incentives are the underlying determinants of economic performance. Thus, in the Zimbabwean context, the government has not made gigantic strides to aid small scale miners especially in rural areas like Chakari. The government has also failed to assist the potential miners who have been engaged in illegal mining with economic incentives to award mineral rights to them. This has thus, affected growth in Chakari. The Property Rights Theory hence from Douglas North's window greatly informs this study.

2.9 Summary

Property right refers to an owner's right to use a good or asset for consumption and or income generation referred to as "use rights" and it can also include the right to transfer it to another party, in the form of a sale, gift, or bequest, referred to as "transfer rights. As part of property rights, mineral rights are the legal ownership of minerals. Mineral rights are vital for livelihood development. Livelihood development involves the advancement of activities that involves safeguarding economic and social security. The activities thus focus on addressing gender inequalities, poverty, vulnerability and sustainable development. These can thus be safeguarded by ensuring that vital rights and in this context mineral rights are respected.

In Zimbabwe the extraction of mineral dates back to the 17th Century where the Munhumutapa kingdom had its economy anchored on trade with the Portuguese, in which gold was at the center of that trade, mineral extraction in has since then been vital and minerals such as platinum, gold, diamonds, methane gas, asbestos, nickel, coal and chromite among others have been vital for Zimbabwe in terms of exports. The extraction of minerals has been done formally and informally and the latter has provided direct livelihood for more than one million people critical in a country grappling with high unemployment in the country. The country has several legal and Institutional frameworks that aim at regularising mining but access to minerals has been affected by the failure of Zimbabwe as a state to initiate proper, realistic channels that enable the general population to access minerals. As explained by the property rights theory, access to minerals has been jeopardized in third world countries because of poor formulation and implementation of mining institutions.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This study adopted the interpretivist qualitative research methodology to articulate the importance of mineral rights to livelihood development in Zimbabwe. The case study approach was thus used in which Chakari village was the unit of analysis. The researcher targeted ward 1 and 2 in Chakari in which respondents came from the community level, miners and farmers, the Ministry of Mines and the Ministry of Lands. While questionnaires were distributed systematically at the community level, miners and farmers formed Focus Groups Discussions (FDGs) while in-depth interviews were conducted with officials from the Ministry of Mines and Ministry of lands. Purposive sampling was used for the latter two groups of respondents. Data gathered during the

course of research was analyzed using thematic analysis and the researcher observed the ethics during the study.

3.2 Research design

This study employed a case study research design which is used for generating primary data. Van Wyk (2012) points out that a research design is the overall plan for connecting the conceptual research. Same further notes that research design articulates what data is required, what methods are going to be used to collect and analyze this data and how all of this is going to answer your research question. The researcher employed the use of a case study research design in this study also commonly known as multiple case study approach. Vause (2006) notes that the function of research design is to ensure that the evidence obtained enables you to effectively address the research problem logically and as unambiguously as possible. The multiple case study approach enabled the researcher to clear any ambiguities that may arise and at the same time help him to understand the real issues at play in Chakari.

3.3 Population

The researcher targeted ward 1 and 2 in Chakari. In order to cover a lot of ground 30 households not involved in either farming or mining were targeted, 20 miners and 20 farmers and 1 big mining company for information relating to community share ownership scheme. For policy related issues 1 official each from the Ministries of Lands and Mines, and 1 DA were selected. Community leadership's input was also considered on the account of 2 village heads and 2 councilors. Table 3.1 below shows the key

informants or the target population that were the respondents of the research. At the community level 30 households, 2 councilors, 2 village heads and district administrator were targeted and they contributed to the research through a questionnaire survey, focus group discussions and interviews were targeted and they all contributed to the research. Ten Artisan miners, ten small scale miners, the manager of Golden Valley Mine and 20 farmers formed the second level of the target population. The researcher also targeted Ministry of mines and ministry of lands in the Sanyati District. The fore mentioned formed the key informants as activities in the area understudy namely mining activities and farming activities impact on their livelihoods. The ministries and district offices as the policy formulators were also vital in unpacking how mineral rights and the extraction of minerals have impacted on livelihood development in Chakari.

Table 2: Target sample and key informants

| Level | Target sample and key informants |
|--------------------|--|
| Community level | <ul style="list-style-type: none"> • 30 households (sample) • 2 councilors (key informant) • 2 village heads (key informant) • 1 District Administrator (key informant) |
| Miners and Farmers | <ul style="list-style-type: none"> • 10 artisanal miners(sample) • 10 small scale miners (sample) • 1 big mine manager (Golden Valley Mine) (key informant) • 20 farmers(sample) |

| | |
|-------------------|--|
| Ministry of Mines | <ul style="list-style-type: none"> • 1 Provincial official (key informant) |
| Ministry of Lands | <ul style="list-style-type: none"> • 1 District Lands Officer (key informant) |

3.4 Sampling Procedure

In this research process, systematic sampling was used to identify members of the community who are neither involved in mining nor farming as the main source of income. In coming up with the correct sample of those who were not full time miners and farmers, local councilors and village heads were very helpful in the identification process. Chakari is a politically stable area which is dominated by one political party and the people practically know each other and this made it easier for the researcher to identify households that were not into mining and farming full time. Having identified this research population, the researcher then randomly sampled 30 people by systematically selecting every 5th household in ward of around 150 households. The researcher also engaged the services of Chakari constituency coordinator whose experience in coordinating the constituency meetings proved to be valuable in purposively identifying artisanal and small scale miners and farmers for the focus group discussions. Due to the enthusiasm and great interest shown by the farmers and miners to partake in the study the focus group discussions ended up being composed of 20 participants each instead of the originally envisaged 15 participants each. The purposive sampling technique was employed in identifying key informants for the in depth interviews as these interviews were meant to corroborate information obtained from individuals whose livelihoods depend mostly on farming and mining activities. These key informants were also identified through snowballing. In executing the sampling

process areas like Bluegrass and Glasgow in ward 1 as well as Turkoise, Patchway and Alabama of ward 2 Chakari were targeted for the research. These areas are the hive of economic activities in both wards. These locations also harbour the two wards' biggest service centers that services both wards.

3.5 Data Collection Instruments

Semi-structured questionnaires- semi-structured questionnaires were administered only to 30 household heads from the Chakari community. These were the community members who were neither farmers nor miners but were primarily involved in other income generating activities. Annum (ibid) describes a questionnaire as a systematically form or document with a set of questions deliberately designed to elicit responses from the respondents. In this research, semi- structured questionnaires which contain open ended and close ended questions were issued out to the 30 households. Time and resource constrains were considered for this study population. Amin (2005) and Sarandakos (1988) confirm the usefulness of questionnaires in terms of their simplicity, time used and easiness for a researcher to administer. However, some of the disadvantages that were observed during and after the administering of questionnaires was that some respondents did not understand some questions and therefore skipped them and or gave biased responses. The researcher was not be able to observe body language and emotions of the respondent resulting in inaccurate interpretation of data. Questionnaires were personally distributed to respondents who were concentrated to the research area and could be identified easily. The researcher personally visited each and every respondent to carry out interviews.

Focus group discussion- Focus group discussions were formed by artisanal miners and farmers. Chakari constituency office which is a government office was chosen for its neutrality and ease of access although not as comfortable as the ideal. A seasoned moderator who was quite vested in social science research and a professional video recorder were engaged by the researcher. Initially the researcher invited only 15 participants for each of the 2 focus group discussion but due to the interest generated by the topics there was some gatecrashing of the venue by a larger number of participants who wanted to be part of the discussions and as a compromise 20 participants for each group ended up being accommodated. The other interested participants were diplomatically dismissed and the discussions then went on smoothly. During the proceedings especially with the miners, tempers were sometimes high with some participants expecting instant help to their problems. Some participants wanted to act as resource persons and spokespersons of the entire group and these were dealt with professionally. The focus group discussions with farmers did not go as scheduled since not even a single farmer turned out as there was a gold rush near the venue prompting the researcher to reschedule it.

Interviews- The researcher identified key informants as kraal heads, DA, Member of Parliament Lands officer, Ministry of Mines official, Councilors, and Golden Valley Mine official as key informants. These are practitioners in their different fields of specialization and were therefore interviewed individually. Their rich knowledge in their various fields certainly added value to the research. Interviews, which are face to face interactions with respondents were conducted

verbally. A combination of audio recording and note-taking was employed during the interview process. Semi-structured interviews which according to Abawi (ibid) include a number of planned questions that the interviewer has more freedom to modify were used. The semi-structured interview for this research population gave the researcher freedom to probe and get clarifications whenever the need arose.

3.6 Data analysis procedures

The data analysis procedure is concerned with attaching meaning and sense to the raw data gathered. The process of analyzing this data was done on a step by step basis. The first and perhaps the most important stage was that of transcribing interviews from tape to paper and to read over the notes in order to get a general idea of what the people were saying. The researcher then examined and recorded patterns of emerging themes from the data collected. The themes thus formed categories of analysis. In this respect, the data that was collected in from the target population was grouped into themes through a system of coding or indexing of the data with similar characteristics and then analysed on case-by-case basis. The researcher then related different ideas and themes to one another by using the thematic analysis approach.

3.7 Data collection plan

The research was carried out after permission was granted by relevant authorities that included the Sanyati RDC, Sanyati DA, Kadoma Police and Chakari House of Assembly member. The researcher with the help of local leadership of Chakari then identified the

artisanal and small scale miners as well as farmers who were the selected through random sampling as alluded to earlier.

3.8 Ethical considerations

In this study, ethics were highlighted in order to protect participants from possible retribution and any adversities that they could have faced during and after the study especially illegal gold miners. The researcher sought the informed consent of the participants who voluntarily agreed to participate in the study based on full and open information. Further, the researcher truthfully disclosed all the material facts about the research. The researcher respected the privacy and confidentiality of the information and person of the participants in data presentation and analysis hence no names or pictures were used to protect the identity of the respondents. The researcher sought clearance from the Minister of State for Mashonaland West province and the Kadoma District Police for permission to carry out the study. The researcher was in constant liaison with the local leadership that included the Chakari house of assembly member and councilor.

3.9 Conclusion

In this chapter, the researcher explained the research methodology and the research design that was used. Data collection and data analysis methods used were also discussed together with advantages and disadvantages of using the same.

CHAPTER 4: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

The chapter captures experiences, facts and opinions of various stakeholders involved directly or indirectly in the gold mining activities in Chakari. Information on gold mining activities and their impact on people's livelihoods in Chakari was gleaned from miners themselves (illegal and legal), community leaders and government officials. While, mining was found to be the mainstay of economic activities in Chakari and the bedrock of people's livelihoods development, the majority of local inhabitants of

Chakari are still finding it difficult to legally acquire fully mineral rights due to a plethora of challenges mostly emanating from the shortcomings of the mineral policy of Zimbabwe. This chapter therefore, brings to the fore the nature and scope of gold mining activities in Chakari as well as policy issues affecting people's livelihoods.

4.2 Characterisation of Gold Mining Rights in Chakari

The results of the research indicated that mining rights holders range from exclusive holders to non- mining rights holders. Comparatively, it was discovered that those with exclusive mineral rights were few as compared to those who had quasi and non-mineral rights. Big mining companies like Falcon Gold Zimbabwe and Golden Valley Mine as well as few individuals who have mining licenses own vast mining claims enjoying the protection guarantees of private property whilst the majority of the locals do not have legal rights to the minerals they are exploiting as illustrated below.

4.2.1 Full Mining Rights Holders

4.2.1.1 Large scale Mining

During the research process, some revelation came out to the effect that there are only two large scale mines who enjoy full mining rights in Chakari. An individual or company is deemed to have full mineral rights over a claim upon acquisition of a mining registration certificate.

4.2.1.2 Falcon Gold Zimbabwe

Falcon Gold Zimbabwe (PVT) Ltd is the owner of the now defunct Dalny Mine Chakari. Dalny Mine folded operation in 2012 but Falcon Zimbabwe still retains its gold claims. During focus group discussions with miners and farmers, it came to light that Falcon Gold Zimbabwe which used to operate Dalny Mine in Chakari used to employ more than two thousand (2000) employees until its closure in 2012. Chakari House of Assembly member and a Ministry of Mines official corroborated this information by adding that although Falcon Gold Zimbabwe was in the process of negotiating with Rio-Gold Zimbabwe for the purchase of Dalny Mine, Falcon Gold Zimbabwe is still the bonafide owner of Dalny Mine which has several claims in Chakari. It was also revealed that Falcon Gold Zimbabwe was a subsidiary of Falcon Gold, a Canadian company owned by a consortium of white business people. Despite the fact that Dalny Mine folded its operations in 2002, its parent company Falcon Gold, has not surrendered its mining claims to the government and neither has it transferred them to anyone. Chakari Residents have also confirmed the arrests of several illegal miners by Dalny Mine Security for trespassing and illegal mining.

4.2.1.3 Golden Valley Mine

The Golden Valley Mine is the only functional large scale mine in Chakari and Sanyati RDC. The Mine is wholly privately owned by John Mark and Company. The Company has shareholders from Zimbabwe, South Africa and the United Kingdom. The Golden Valley manager confirmed that the shareholding structure of the company had no locals from Chakari and that the private entity employs nearly eight hundred employees, the majority of whom are domiciled in Chakari. Some further revealed that however, a third (1/3) of the company's shares is a charitable component leaving two thirds to the

shareholders. Employees and the local community do not have shares in the company and the mine manager hastened to explain that the company was already supporting 13 locally based Charities in Kadoma City and Harare City through the 1/3 Charitable Component. According to the Manager there was therefore no further need to cede some of the shares of the company to locals or employees neither was the company obligated to comply with the Indigenization and Economic Empowerment Act of Zimbabwe to cede 10% of its total value to the community share ownership scheme. In fact, the manager claimed that the Company's 1/3 charitable component was more than the 10% required by law for Companies to surrender to the Community Share Ownership Scheme.

4.3 Tribute Agreements vis-à-vis Mineral Rights in Chakari

During the focus group discussions with miners it was revealed that a smaller section of people from Chakari do possess some pseudo-mineral rights in the form of Contracts or Tribute Agreements. According to the Ministry of Mines officer interviewed, a tribute is a short- term Contract between the tributor and the grantor, the grantor being the person or company with exclusive mineral rights (one who possesses the registration certificate of the mine) and the tributor being the one who is granted the Tribute. The Mines and Minerals Act Article [Chapter 21:05] notes that "tribute agreement" means any agreement or arrangement entered into after the 1st July, 1947, where under any person has given a tribute, licence, concession, authority or other right to mine a mining location to a tributor; and includes any such agreement or arrangement which was entered into before the 1st July, 1947, and which is renewed after such date, and any agreement to alter the terms of a tribute agreement which has been approved by the

Board and any renewal of a tribute agreement which has been approved by the Mine Affairs Board; “tributor” means the person who has been granted the right to mine a mining location. Even though a tribute is a legally binding document which is recognized by the Ministry of Mines and Mineral Development upon registration with the Ministry, the tributor does not fully possess mineral rights to that tribute because he/she is subjected to the conditions of the grantor who has exclusive mineral rights.

The Golden Valley Mine manager revealed that the company has given out 42 tributes to people from Chakari. He further explained that these tributes were valid for a three year term which was renewable. Tributors are in turn expected to pay annual rentals of US\$50.00 to the company. The focus group discussions with miners painted a very gloomy picture of the tribute system. It was noted that despite claims by the Golden Valley Mine manager of the existence of 42 Tributes, the Tributes agreements in question in fact expired in 2015 and no tribute was renewed since then. Golden Valley Mine has verbally given the tributors the green light to continue working on their tributes without proper renewal procedures.

The FDG with miners also revealed that the tribute agreements do not bestow upon them the status of full mineral rights holders but it rather gives them pseudo-rights and as a result they have face a myriad of legal and operational challenges. In addition tributors do not enjoy the same privileges as those enjoyed by full mineral rights holders. Tribute holders have no locus standi to determine or change the terms and conditions of a tribute agreement. Tributors bemoaned lack of security of tenure that characterizes the tributes. The lack of security of tenure of the tribute agreements often leads to termination of the tribute agreement by the grantor without notice. Termination of tribute agreements can

be as a result of different factors chief among them failure by the tribute holder to pay the required annual rental fees of \$50.00. Some miners intimated that tributors are often at the mercy of senior managers of the company granting the tribute who after having discovered that the tribute holder's claim has rich gold deposits, have tried to force their way into partnering the tributor. In the worst case scenario, the tributors have had their agreements cancelled and the tribute given to the company bosses' proxies since company employees are not allowed by the law to hold tributes. This had happened when the tributors refused to enter into a partnership and in some instances the tributors have been relocated somewhere usually where the gold reef is poor.

This situation has often led to tributors seeking recourse in the courts taken to court as was in the case between Golden Valley and one tributor who was taken to court for refusing to vacate his original tribute to a tribute that was reallocated to him. Tribute holders usually end up losing the litigations because they do not have money for legal costs and technically due to the fact that the terms of tribute agreement are more favorable to the tributor. During the focus group discussion with artisanal/illegal miners, they pointed out that the prevalence of litigation cases against Golden Valley Mine was actually the main reason that led to the mine not to renew their tribute agreements since 2015.

There was also a notable concern especially on the life cycle of the tribute agreements. A tribute agreement as stated earlier is valid for three (3) years with the option of renewing it. The 3year life cycle tribute presents its own unique set of challenges to the tribute holder. The tribute holder cannot enjoy the kind of support that other established small scale miners enjoy as a result of this three (3) year renewable clause. Tribute

holders revealed that financial support from the government and independent financiers has eluded them due to the fact that the lease agreements are too short and therefore cannot be used as collateral. The miners' bemoaned lack of consideration by the government which is currently supporting small scale established miners with financial and material support. To make matters worse, the tribute holders do not belong to any mining association because the Zimbabwe Mines Federation do not currently recognize them as bonafide miners. The tributors have to the Affirmative Action Group in a bid to be represented but have however, dumped the organization accusing it of being too political and seeking to fleece the miners. This lack of representation at association level has also contributed immensely to lack of funding from the government as well as other independent financial houses. The Miners (tribute holders) rather depend on fly by night individual sponsors who would demand half of the proceeds after deducting all the operational expenses, leaving the tribute holder with almost nothing.

Due to lack of funding and insecurities of the tributes agreements, the tribute holders have failed to invest heavily into capital machinery required for the capital intensive mining business. This has hindered development of their claims into productive gold mines. The tribute holders rely on electric generators for power and submersible pumps powered by those generators to dewater the mine shafts. According to the miners, the generators are not reliable and are susceptible to constant breakdowns due to overuse and this is also the same situation with the water pumps and compressors. The miners' profits are further eroded by processing expenses at established custom gold milling plants. The tributors do not have gold processing plants at their mining sites as the tribute agreements do not give them powers to establish one and as such the mines end

up seeking processing services at established milling plants as earlier alluded to. The miller requires processing fees and transport expenses as well as buying the gold from the miner at a lower than normal rate.

4.4 None-mineral Rights Holders and the Extraction of Gold in Chakari

The non-mineral holders constitute the vast majority of people who are involved in mining in Chakari. Information gleaned from the Ministry of Mines indicates that Chakari is endowed with vast gold deposits and that artisanal mining is the bedrock of economic activities in Chakari. Artisanal and illegal miners fall in the same category as they are sometimes used interchangeably. In an interview conducted with an official from the Ministry of Mines, the Mines and Minerals Act does not recognize artisanal/illegal miners as having mineral rights, the respondent noted that;

....there is no clear policy yet on the legality of the operations of artisanal miners despite the existence of arrangement with the Reserve bank of Zimbabwe whereby artisanal/ illegal miners are allowed to deposit gold at Fidelity printers. This arrangement is just a national strategy of mobilizing and boosting gold reserves. As at law, all mining activities being carried out by the artisanal/ illegal miners are *contra juris* despite the fact that artisanal/ illegal miners contribute 40% of all the gold delivered to Fidelity Printers (Interview with informant 20 February 2017).

Therefore, literally, the whole area of Chakari is left with little open land for the establishment of new claims. The larger part of Chakari area is full of claims owned by Golden Valley, Falcon Gold Zimbabwe as well as few individuals especially former commercial white farmers who had both mineral and farming rights on their former farms. According to the illegal miners, open space for new claims can only be available when current claims are forfeited by the state and those are usually grabbed by those with financial muscles. The average cost of the process of established a working mine is

around US\$4000.00 and this was found to be out of reach of many people in Chakari. Artisanal/illegal gold mining is in some cases triggered by gold rush on underutilized gold claims owned by individuals or companies or just the discovery of Gold deposits by other land users like farmers on their land or even on their residential stands. Under these circumstances individuals from Chakari and beyond would just circumvent the process of registering the claim and partake of mining activities illegally. In terms of numbers about 95% of the people from Chakari were at one point or the other involved in artisanal/ illegal mining. During FGD with farmers all the farmers alluded to the fact that indeed gold deposits were found on their pieces of land whatever the size of that particular land. All the farmers interviewed also agreed that they were illegally carrying out mining activities on their pieces of land especially during the dry season. The farmers indicated that they could not acquire mineral rights since they were settled on already pegged claim hence resorting to illegal mining. The Sanyati DA, the Sanyati District Lands Officer and the Ministry of Mines and Mineral Development corroborated this fact that the majority of farmers in Chakari were carrying out illegal gold mining and have no mining rights.

Household heads that do not depend solely on either mining or farming for their livelihoods have at one point in their lifetime engaged in artisanal/ illegal mining. All household heads indicated that they have relatives engaging in illegal mining in Chakari. Most of the former Dalny Mine employees have turned themselves into full time illegal miners for survival according to some of the former Dalny Mine artisanal/illegal miners interviewed. These facts were further corroborated by the Ministry of Mines and Mining Development official who noted that the Ministry thought that the closure of Dalny

Mine would turn Chakari into a ghost township but this was not to be as the employees quickly transformed themselves into artisanal/ illegal miners. The former employees who gained some knowledge in mining during their working days at Dalny are now resorting to illegally engaging in mining operations in disused mining shafts of Dalny Mine and Golden Valley Mine. They often practice dangerous mining practices of hitting the supporting pillars of the disused mines in a bid to extract gold resulting in shaft collapse and death.

Some illegal miners come in the form of gold scavengers who use metal detectors to hunt for gold nuggets. These are very few due to the fact that acquiring the metal detector entails parting away with a great deal of money. Effective detectors cost between \$3500.00 and \$6000.00 a figure that is out of reach of many. However these unlicensed metal detector owners do not work alone but have syndicates of no less than five (5) people who include rippers and buyers of gold who are also illegal. The gold scavengers have no fixed gold claims and are highly mobile. They search for gold nuggets everywhere including in claims that belong to individuals or companies and can make a find up to 10kgs of gold at one go.

4.5 An Analysis of Mining and Livelihoods in Chakari Village

4.5.1 Large Scale Mining

Since the closure of Dalny Mine in 2012, Golden Valley Mine has remained the only operational large scale mine in Chakari. Golden Valley Mine which had an employee compliment of less than 500 in 2012 now boasts of a strong 800 employees whose livelihoods and those of their dependents depend on mine employment. The mine has a

capacity utilization of 100% as measured by the processing plant. It has got an annual/ average production of 700kg of gold which is one of the highest among the gold producing large scale mines in Mashonaland West Province. Apart from direct financial benefits in the form of salaries and allowances which employees get each month, the Company has gone an extra mile in implementing some projects for the community of Chakari which have improved their livelihoods. The company owns and looks after three schools namely Patchway Primary, Golden Valley Primary School and Kwayedza Secondary School. The schools are well functioning and are well resourced as a result of funding from the mine and this has gone a long way in ensuring that education of the community is guaranteed. Most miners and farmers appreciated the role being played by Golden valley Mine in uplifting their children's educational needs through the continued funding of these schools. The Mine also provides free accommodation with piped water and electricity to teachers at these schools.

The Chakari community also benefits from free clean and safe drinking water from Golden Valley Mine. The Golden Valley Mine Manager confirmed this by alluding to the fact that the Company has laid water pipes on the Kadoma – Chakari highway where villagers draw free clean drinking water from taps for themselves and their animals. After every kilometer there is a tap with running water courtesy of Golden Valley Mine. Resettled farmers between Kadoma and Chakari also use the tap water to irrigate their nutrition gardens and for domestic purposes. The water that comes out of these taps comes directly from the mine shafts underground. As long as the mine keeps operating, villagers are assured of constant water supply and the reverse is true. Villagers from Chakari do not necessarily need to travel 36 kilometers to Kadoma General Hospital to

access medical facilities. This has been made possible by the availability of a well-stocked clinic at Golden Valley Mine. In fact most of the miners and farmers that were engaged, prefer the Golden Valley Clinic for medical attention more than the government and council hospitals in Kadoma due to the fact that the clinic is well stocked with medicines at any given time and its staff is very professional and well incentivized by the mine. In addition to these benefits, the shopping centers in Chakari as well as all supporting industries depend largely on the existence of the mine for their clientele. It is vital to note that 42 tribute holders also depend on the existence of the mine for their family livelihoods since their tributes are given to them by the company and not the government.

Despite the fact that the company is operating at 100% capacity, it has not been spared from the economic challenges that continue to threaten its existence and consequently the livelihoods of more than 1000 people who directly depend on the mine. Shortage of foreign currency in the country has hugely affected the operations of the mine as most of the spare parts for the plant are imported. The company also imports specialist staff from Europe for maintenance of the plant machinery as the country is currently in short supply of skilled engineers.

4.5.2 Artisanal / Illegal Mining and Livelihoods.

The Sanyati DA summarised the livelihood situation in Chakari at the aftermath of the Dalny Mine closure in 2012 as “precarious and dire” as many people suddenly became vulnerable as a result of loss of employment. A lot of food aid NGO’s approached the

Sanyati DA's office with the intention to offer assistance to mitigate the vulnerability levels that had risen to unprecedented levels as a result of Dalny Mines' closure. However, to a larger extent, the livelihoods situation did not turn to be as dire and as precarious as projected as the larger chunk of the former employees quickly assimilated themselves into the world of artisanal/illegal gold mining. Artisanal or illegal gold mining became the anchor on which their livelihoods were hinged upon. Artisanal/illegal mining has not uplifted only the former Dalny Mine employees' livelihoods but almost every single individual in Chakari has benefitted from it directly or indirectly.

Although Chakari is predominantly a farming area, even farmers themselves have admitted to the positive contribution of illegal artisanal mining to their livelihoods. Food vendors, sex workers, suppliers of explosives and mining accessories all depend on the success of *chikorokoza* (artisanal/illegal mining) for the success of their businesses. Tribute holders, who can qualify to fall under artisanal/illegal miners since their tributes have expired, also indicated that they have noted a vast improvement in their livelihoods situation as a result of artisanal/illegal mining of gold. Although, the practice of artisanal illegal mining is capital intensive, the rewards are very high due to the stability of gold prices and availability of a ready market. More than 60% of artisanal/illegal miners claimed to deposit their gold with fidelity printers where they are paid instantly and in cash. Some of the artisanal/illegal miners are not comfortable with the formal systems of depositing gold to Fidelity Printer (which is the largest security and commercial printing company in Zimbabwe specialising in the buying of gold from small scale miners) and as a result prefer to sell gold at the black market where they are paid lower prices than those prevailing in the formal system. The lower prices do not

worry them that much as long as they get cash, thus according to the artisanal miners and the Ministry of Mines official. The two motivating factors, that is hard cash and ready market outweighs the risks associated with artisanal illegal mining and gives the artisanal/ illegal miners the impetus to work even harder to improve their livelihoods.

As a result of the two motivating factors, that is, ready cash and ready market, liquidity has not been much of a problem to the illegal miners. They miners have been able to acquire assets which have in turn improved their socio-economic wellbeing directly as a result of gold mining activities. Listed below are some of the assets that have been acquired by the artisanal illegal miners.

Table 3: Assets acquired by artisanal miners

| | Assets acquired by artisanal/illegal miners | Other uses of income generated by artisanal/ illegal miners. |
|---|--|---|
| 1 | Houses | Buy food for the family Getting married |

| | | |
|---|--|---|
| 2 | Vehicles | Paying rentals Paying school fees for their children |
| 3 | Livestock(cattle, goats, chicken) | |
| 4 | Mining equipment (generators, compressors and pumps) | |
| 5 | Furniture | |
| 6 | Built some grocery shops | |
| 7 | Boreholes | |

Source: FGD results with miners 16 February 2017.

The table above shows the benefits that have been associated with mining activities in Chakari. The artisanal miners have acquired various fundamental assets that have contributed to better standards of living. Thus, 100% of the artisanal / illegal miners have roofs over their heads, some through ownership and some through renting of residential properties. Some have been able to purchase residential stands and some have even managed to go further and construct their own houses providing quality shelter for their families. Those who have not been able to realize much profit cans still manage to pay monthly rentals which average \$60 for a standard four roomed house. In terms of food security, the artisanal/ illegal miners are food secure. The miners indicated that they use some of the money from their proceeds for food requirements which they pegged at an average of \$100 per month. One of the greatest advantage they have is that Chakari community is also a farming community and as such the artisanal/ illegal mines purchase most of their food requirements locally at lower producer price. Some of the artisanal/ illegal miners have small plots where they practice subsistence agriculture.

The artisanal mines revealed that before venturing into mining, they had to borrow cattle for drought power to cultivate their small plots but they have since managed to purchase their own cattle as well as farming implements like ploughs and hoes. The artisanal / illegal miners have also managed to buy goats and chickens which they use for food consumption and in some instances they resell for profit especially in times when mining activities are not producing much.

On access to health and medical facilities, the artisanal/ illegal miners are in position to meet minor medical requirements for their families. The money they generate is enough to purchase over the counter medication and to cover for simple medical procedures but face great challenges when it comes to complicated major medical procedures. Some of the artisanal/ illegal miners have access to safe drinking water at their homesteads since they have managed to drill some boreholes in their homes.

Due to security uncertainties surrounding artisanal/ illegal mining, some of the mines have gone a step further in expanding to other income generating business like renting grocery and liquor shops. Some of the miners are even proud owners of commuter omnibuses that ply the Kadoma-Chakari route. Thus, 100% of the artisanal/ illegal miners are able to meet educational costs per their children and dependents at least up to secondary school level. Artisanal miners who have expanded to other business ventures like transport industry attributed their success to a once off rich gold pickings.

4.5.3 Mining Related Income Generating Activities and Livelihoods

In Chakari it is not mining per se that people's livelihoods is depended on. Both legal and illegal mining has led to the mushrooming of secondary economic activities that

have gone a long way in sustaining people's livelihoods and reducing vulnerability levels. Despite the abundance of gold deposits and good farming soils in the study area not every household depends directly on mining and farming. Not everybody has land for subsistence farming and the energy, perseverance and sagacity required in the dog eat dog business of artisanal/ illegal mining. The mining industry also rely on other players in the supply chain and service industry to survive. These synergies have necessitated the establishment of some mining related economic activities in Chakari. These activities have proved to be very important to the livelihoods of many people.

Some of the households are engaged are into supplying of mining accessories. These mining accessories feed directly into the artisanal/ illegal and small scale mining industry. A variety of goods and services are available twenty four hours a day at all shopping centers dotted around the study area. Goods that are supplied by these small traders include batteries, flash lights, drill bits, safety ware, mercury, chisels, hammers, sample plates, diesel and petrol. These goods have a ready market and better returns as they are used daily by artisanal/illegal miners. Most artisanal / illegal miners prefer to purchase these accessories locally than to foot extra transport expenses to the nearest city of Kadoma to buy the goods.

Mercury and explosives are very important tools of trade for the illegal and artisanal miners. Mercury is used to tap the Gold and explosives are used to blast the Gold belts to increase production. Without these two important components the artisanal and illegal miners would struggle to survive. However, during interviews with the miners, it was revealed that it was illegal for individuals without licenses to possess as well as to sell

the aforementioned goods and therefore individuals who sell these goods do so clandestinely. Despite the fact that possession and selling of mercury and explosives without a valid license is a criminal offense, individuals who are into this business are many in Chakari. These individuals have indicated that they get as much as \$800.00 profit on average per month, far more than their average expenditure of around US\$500.00 per month.

The livelihoods of retailers, vendors and bar operators are very much dependent on the business they get from the miners and farmers. Of these three, retailers and bar operators constitute a large number followed by vendors. Retailers specialize in groceries whilst bar operators sell liquor and provide entertainment in the form of live bands and satellite television entertainment. Whilst retailers have a larger clientele from Golden valley employees, bar operators depend largely on artisanal/ illegal miners for most sales. Most artisanal/ illegal miners drink beer on a daily basis to drown their sorrows associated with the troubles of *Chikorokoza*. The artisanal miner's insatiable appetite for alcohol is unmatched according to one village head. The village head reiterated that liquor business is one of the most lucrative businesses in Chakari. Households that depend on liquor business have indicated that they do not get less than US\$800.00 profit per one calendar month and are never out of business.

Vendors are divided into vendors of second hand clothes, vendors of fast foods and vendors of agriculture products. Of these vendors, those specializing in agricultural products are in the majority followed by vendors of fast foods. The majorities of vendors of second hand clothes are seasonal and are mobile. They usually surface when there is

gold rush and in most instances are from the nearby city of Kadoma. Concerning the vendors who deal in agricultural products, these supply products ranging from grains, vegetables, chickens and goats. They supply directly to clients from the mining compound as well as artisanal/ illegal miners. They have a larger clientele base than the second hand clothes and fast food vendors. On average vendors get a profit of not less than \$300.00 per month which is almost close to the poverty datum line.

The service industry is the least in terms of households that depend on it for their survival. Only 9% of the households depend entirely on sex industry. Commercial sex workers target mostly artisanal/ illegal miners for their business. This industry albeit its size, is perhaps the most lucrative according to the figures on the ground. On average commercial sex workers clock around US\$50.00 per day during the periods of gold rush. According to the Councilor for Sanyati RDC ward 2, sex is the second most sought after service by *makorokoza* after beer. This industry is a high risk high rewarding profession.

These various economic activities that feed into and from the mining industry in Chakari have gone a long way in developing the livelihoods of the households involved. This was shown by the quality of assets that the households acquired since their interaction with the mining industry. Besides the acquisition of assets, the proceeds realized have also gone a long way in meeting the socio- economic needs of these households thereby improving their livelihood situation as illustrated by the table below.

Table 4: Mining and livelihood development in Chakari

| ACTIVITY | NUMBER OF PEOPLE INVOLVED | TYPE OF CUSTOMERS | AVERAGE MONTHLY INCOME | ASSETS ACQUIRED | OTHER USES OF INCOME |
|---------------------------------------|---------------------------|---|------------------------|---|--|
| RETAILING (GROCERY) | 5 | Golden Valley employees, <i>makorokoza</i> and farmers. | \$800. | Houses, residential stands, vehicles, furniture | Medical bills, school fees, holiday, food, rentals and rates |
| LIQUAR BAR | 4 | Golden Valley employees, <i>makorokoza</i> and farmers | \$800.00 | Houses, residential stands, vehicles, furniture | Medical bills, food, school fees, transport, rentals and rates |
| EXPLOSIVES SALE | 3 | <i>makorokoza</i> | \$700.00 | Houses, residential stands, vehicles, furniture | Medical bills, food, school fees, transport, rentals and rates |
| MINING ACCESSORIES SALES | 3 | <i>Makorokoza</i> | \$ 600.00 | Houses, residential stands, vehicles, furniture | Medical, food, school fees, transport, rentals, rate |
| VENDORS(VEGETABLES ,GRAINS,LIVESTOCK) | 5 | Golden Valley employees, <i>makorokoza</i> and farmers | \$300.00 | Plots, furnisher, residential stands | Food, school fees and transport |
| VENDORS (FAST FOODS) | 2 | Makorokoza and Golden Valley employees | \$300.00 | Plots, furnisher, residential stands | School fees, food, rentals and rates |

| | | | | | |
|------------------------------|---|--|----------|---|--|
| SEX WORKERS | 1 | <i>makorokoza</i> | \$600.00 | | Rentals, food, medical bills and rates |
| CLOTHES AND FURNITURE SALES | 3 | Golden Valley employees, <i>makorokoza</i> and farmers | \$700.00 | Houses, residential stands, vehicles, furniture | Medical bills, food, school fees, transport, rentals |
| EMPLOYEE (GOLDEN VALLEY MINE | 4 | | \$600.00 | Houses, residential stands, vehicles, furniture | Medical bills, food, school fees, transport, and rates |

Table 4.2 is a summary of livelihood development activities that have been enhanced or created because of artisanal mining. These have thus helped the artisanal miners to further generate more income and employ various members of the community, thereby enhancing the human security of the members of members of Chakari.

4.5.4 The Nexus between Farming and Livelihoods in Chakari Village

According to Sanyati District Lands Officer, Chakari falls within agricultural region 3 of the Country. Sanyati RDC ward 2 Councilor indicated that a fifth of the farms in Chakari are irrigated with four fifth of the farms not under irrigation. The thriving of the agriculture industry and the livelihoods of those who depend on agriculture therefore depend largely on the availability of good rains and good harvests. Majority of the farmers in Chakari are beneficiaries of the government's land reform program with the larger number of those being A1 farmers and a smaller number being A2. Most farmers are legal owners of their pieces of land as they possess offer letters from the Government.

A2 farmers produce entirely for commercial purposes. During the focus group discussions with farmers, not a single farmer was into commercial livestock farming. The focus group discussion with farmers was composed of model A1farmers (who comprised the majority), model A2 farmers and communal farmers. All A1 farmers produce for domestic consumption and commercial purposes. For A1 farmers farming is for business and survival. If the harvests are poor, they retain produce for domestic consumption and if the harvests are good they sell the surplus and keep enough produce for domestic consumption.

Ward 1 Sanyati RDC Councilor alluded to the fact that the entire ward's livelihood depend primarily on agriculture. Farmers also concurred with this position during the focus group discussions that farming was their mainstay. The farmers confessed to an improved lifestyle ever since the acquisition of their pieces of land since the commencement of the land reform in 2000. Farmers have managed to acquire some assets like houses, cars and household furniture and these have gone a long way in improving their lives. Some farmers have also managed to pay school fees for their children as well as catering for their medical needs. Ever since acquiring pieces of lands, farmers have claimed to have been food secure, depending on the availability of good rains.

However, the farmers confessed that despite the potential of the farming business, it has not yet reached the levels where farming alone can develop the livelihoods levels to satisfactory levels. In some instances despite the possession of fertile lands, farmers have had to rely on government for food aid. The farmers have sometimes had a ridiculous situation where children are chased away from school due to non-payment of fees even if they would have had a good harvest. Admittedly the farmers confessed that even though their livelihoods primarily depend on farming, in reality it has not been so due to a number of reasons ranging from natural phenomenon to human induced problems.

The biggest threat to farming business and consequently the livelihoods of farmers is unreliable rainfall patterns in Chakari. Ever since 2000, the rainfall patterns have been erratic, rendering farming a very tricky business venture. This has been made worse by failure to rehabilitate supplementary water boreholes by the new occupiers. Bureaucratic

challenges at Grain Marketing Board (G.M.B), where farmers sell their produce have also contributed to diminished livelihoods of farmers. G.M.B can take up to 3 years to pay the farmer his dues. On top of getting their dues late, the producer price of US\$360.00 per ton of maize and US\$0.40 per kilogram of cotton is pathetically low according to farmers. At the end production costs would outweigh profits since production costs are very high. Cotton farmers also complained that besides the low producer price of their cotton product, failure by the government to capitalize the Cotton Company (Cotcco) has also led to cotton farmers receiving their payments late. So pertinent is the issue of late payments that some farmers had to defer their children's education. The late payment of farmers' dues has also led to some families breaking down as a result of suspicion by spouses that their spouses could have squandered the money. Farmers have also indicated that there are numerous community initiated projects like schools and clinics construction that have stalled as a result of late payment of their dues by Grain Marketing Board and Cotton Company .

Intervention measures by the government especially through programs such as the Presidential Well Wishers Inputs Scheme have not done much to mitigate problems faced by farmers. In most cases inputs are distributed late by the government leading to poor harvests due to the fact that the crops would fail to catch up with the rain season. In worst cases, the farmers fail to receive inputs due to corruption by distributing officials. Farmers have accused those entrusted with distributing inputs of gross corruption where they would hoard those inputs for themselves for reselling at the black market. Politics also plays a big role in the unfair distribution of inputs according to farmers. Without

elaborating further, farmers complained that inputs are distributed along political factional lines and this has adversely affected some farmers.

4.6 The Impact of Mining on Farmers and their livelihoods

4.6.1 Negative impacts of mining on Farmers' livelihoods

Artisanal / illegal miners have been blamed for destroying productive farm lands especially due to their unorthodox mining methods. Because of their migratory nature, artisanal miners do not care about rehabilitation of the land degradation they cause as long as they have extracted some gold from them. Unfortunately for the farmer in Chakari, the area is all golden. The use of metal detectors to hunt for gold nuggets by artisanal/ illegal gold miners has been blamed for much of land degradation in Chakari. They do not respect boundaries and in some instances they rip through fields with thriving crops. Farmers have expressed regret for losing their thriving crops to artisanal/ illegal miners who trample through crops in search of gold nuggets. Due to the fact that the discovery of gold nuggets attract thousands of people, many farmers have lost crops that were at various stages of development. Even when the illegal miners discover rich gold nuggets on farms, they do not bother to compensate the farmer for the loss of his crop.

Sometimes the artisanal miners are so daring to the extent of using excavators and picks to dig for the precious mineral. The digging is not systematic due to lack of planning. In fact this method of mining has no planning at all but is done rather haphazardly and hurriedly just to obtain quick results. Big holes are left out and those pits have claimed the lives of many animals and in some cases have become breeding grounds for disease

that have affected livestock. One farmer at CC Molin farm revealed that many times he has had his beasts condemned because of diseases caused by parasites breeding in the left pits. An A1 farmer at Belfast Farm is seeking relocation to another farm because his land is no longer productive after all the top soil which the artisanal/ illegal miners left exposed was washed away by rainfall. Artisanal miners at this particular farm also destroyed the pastures by indiscriminately cutting down trees and bushes in search of the yellow metal. The farmer is currently surviving on alms which are not enough to cater for all his family's needs and wants.

Apart from the threats posed by artisanal/ illegal miners, small scale miners also pose a danger to the livelihoods of farmers in Chakari. The majority of small scale miners owns or operates gold ore milling plants which are dotted around Chakari. The greatest danger to the farmers posed by these mill operators is the process of cyanidation where miners employ the use of cyanide to recover gold at the mills. Most of these mill operators have no means of testing contamination and as a result water sources where livestock drink are contaminated when cyanide is washed into water bodies by rains. Two farmers from Blue Ranges, in ward 11 lost 6 cattle in early 2017 due to cyanide poisoning. These cattle were mainly used for drought power in the fields and as a result of their death, the farmers are now resorting to hiring cattle from other farmers.

Large scale miners are not a threat to farmers' livelihoods as they practice standard methods of underground mining. The large scale miners leave the surface to the farmer and concentrate on underground mining. They also practice safe measures of chemical disposal.

4.6.2 Positive Impact of Mining on Farmers and their Livelihoods

It can take from a year to three years for a farmer to get paid for his/ her product whilst it can take a few hours for a miner to get paid for his gold. Gold prices are stable and the market ready whilst the market for farm produce depends on demand and the prices also being largely dependent on demand and supply. It can take a day or less for a miner to go back to work but it takes a season for a farmer to go back to the fields. Gold mining is an all year round industry whilst farming is a seasonal industry depending with variables such as availability of rains and inputs. These factors have largely contributed to the farmers assuming dual trades of *de facto* farmers and part time artisanal/ illegal miners. Without mining, farmers' livelihoods situation would become dire and as one miner rightly put it that mining is the farmers' insurance in Chakari.

Farmers revealed that when they don't get money in time from GMB or Cottco, they supplement their daily provisions through illegal mining on their plots or elsewhere. During the winter season right up to next summer season farmers seriously engage in illegal mining activities. During focus group discussions with farmers they reiterated that the importance of mining in their livelihood development cannot be overlooked despite the fact that they would be undertaking illegal mining activities. Farmers actually owe the success of their farming business to mining to some extent. As a result of undertaking mining activities, farmers have been able to supplement income that they get from farming but most importantly in most cases the farming implements like ploughs, harrows, hoes and inputs like seeds, fertilizers and herbicides have been purchased using the proceeds the farmers get from illegal mining activities. When the

rainy season is jittery and when the government delays the release of inputs and money for their produce, the void is filled in by illegal mining and this has ensured continuity in terms of availability of income to buy food, clothes, payment of school fees, payment of medical bills and payment of rentals, the very things that define their livelihoods.

Some farmers have also taken advantage of underground water that is pumped out of the mine shafts to establish flourishing nutrition gardens as well as thriving horticultural projects. The products that came from these nutrition gardens have gone a long way in ensuring adequate nutritional requirements for the households and surrounding communities. The health benefits that the farmers get from the nutrition gardens products has helped families save some money and reduced over reliance in generic drugs which have their own side effects. Besides the nutrition gardens, farmers also get some extra cash from horticultural projects they undertake which they use for daily requirements like transport costs and food.

Some households who are neither farmers nor miners entirely depend on the thriving of these horticultural projects for their livelihoods as they buy the products for reselling at the shopping centers. So it is not only the farmers who are benefiting from the water that is coming from the mine shafts, but also those households who depend on vending of horticultural products for their survival.

4.6.3 Policy Framework and Mineral Rights

The current Mines and Minerals Act (1963) and its subsequent amendments and the Environmental management Act were found to be the two foremost policies that impacts on the acquisition of mineral rights in Chakari and subsequently the development of

livelihoods of the people. Pertinent policy issues range from the Mines and Minerals Act and land reform, mining fees and tariffs versus acquisition of mining rights, administrative issues in the Ministry of Mines and Mining Development versus acquisition of mineral rights as well as the Environmental Management Act impact on mineral rights acquisition. The Indigenization and Economic Empowerment Act was also found to be playing an integral part in the mineral rights acquisition matrix.

4.6.4 Mining Policy and Land Reform

The ushering in of the new land reform dispensation in the mold of the Fast Track Land Reform Program in 2000, brought about its own complexities in land governance. Prior to the land reform, an average farm size was about 300 hectares per farm and in most cases each farm was owned by a single family who enjoyed both mineral and farming rights. The dawning in of the fast track land reform demarcated the land into smaller subdivisions and replaced the single person ownership with multiple ownership of the same land. The former white farm owners lost their farming rights but retained their mining rights. Whereas in some areas miners and farmers are clearly separate in a geographical sense, the case of Chakari is unique in that the same miners were also the farmers. Ministry of Mines official gave a classical example of a particular farmer by the name Antony Lubbe who owned several farms in Chakari and more than three hundred gold claims that stretch from Kadoma through Chakari to Sanyati. When Lubbe lost his farms, he retained his claims and he is not working on them but is keeping them for speculative purposes. All his current claims passes through his former farms.

The Sanyati District Lands Officer emphasized the fact that the failure by the MMA to take into consideration the new land dispensation has resulted into farmer- miner

conflicts some of which have resulted in the incarceration of the new farmers as is the current scenario where many farmers in Chakari have clashed with Lubbe on several occasions. The current MMA has always protected the miner in the event of a farmer/miner dispute according to the Ministry of Mines and Mineral development. Several arrests and convictions of new farmers was confirmed by the Sanyati District Lands Officer. The farmers themselves have revealed that some of them have pending litigations and some have been jailed for mining illegally resulting in suffering of their families due to the absence of the breadwinner. Farmers with pending litigations have had their livelihoods affected greatly since money for food and other requirements had to be diverted to legal costs. Even in instances where the farmer has reasonable moral justification of engaging in mining activities illegally, the MMA is so explicit that a conviction is guaranteed. The Ministry of Mines official has stated that the farmers who are having pending litigations are likely to lose them against the miners as the MMA supersedes any other Act that interferes with mining activities. Although the Ministry of Mines and Mineral Development encourages consultation of the farmer by the miner and joint ventures between them if the farmers' land size is below 20 hectares, the MMA does not compel the miner to commit to such undertakings and in the event that they work together and along the way the miner decides to be greedy, he can sue the farmer and win. The MMA also allows the miner to undertake exploration and to mine using whatever method is suitable. Many farmers have lost their prime lands due to open cast methods employed by the miners in search of gold. Some miners use excavators to open pits either to explore or to mine and in some cases this exercise has taken longer than anticipated by the farmer and as a result the farmer has lost time to put his crop down.

Some miners also takes longer times to reclaim the farmer's land resulting in loss of livelihood for the farmer.

4.6.5 Impact of Mining Policy on mineral rights acquisition

In order for one to acquire mineral rights there are various stages that a prospective mineral policy holder goes through as required by the MMA. According to the Ministry of Mines and Mining Development, the first stage of mineral rights acquisition is purchase of a prospecting license valid for two years, followed by prospecting and pegging of the claim and lastly getting a mining registration certificate that gives you the right to the claim and to carry out mining activities.

The mineral rights acquisition processing fees has been the biggest stumbling block towards acquisition of legal mineral rights by artisanal/illegal miners. The prospective miners expressed willingness and desire to acquire legal mining rights but blamed the high fees regime required to complete the registration process as an impediment to achieve such. For one to become a legal miner, he has to pay US\$200.00 for the prospecting license, US\$200.00 for a mining registration certificate, an average of US\$500.00 for a pegging and average of US\$4000.00 for a geological survey bringing the total amount needed to acquire mining rights to almost US\$5000.00, a figure that is beyond the reach of many. The prospect of parting away with US\$5000.00 has led many to resort to illegal mining.

Illegal mines also dread the explosives handling laws which they say makes handling of explosives very expensive. The laws require the construction of a proper magazine room for safe keeping of the explosives. Construction of such a room is very expensive

according to the specific requirements of the magazine room, the cost of constructing and maintenance of a magazine room is out of reach for many. Acquisition of a blasting license is also very expensive for an ordinary prospective miner as one requires US\$3000.00 to get a blasting license. Miners felt that laws should be relaxed so as to allow to hiring a magazine room and a blaster rather than being compelled to have these on the mining site. In addition in order for one to start the actual mining, there has to be an appointed mining manager prior to commencement of mining operation, a requirement that entails parting with money before operations a condition which the artisanal/illegal miners found unpalatable.

Administratively, the centralization of all administrative issues pertaining to mining activities in Mashonaland Province in Chinhoyi has also contributed to failure to acquire mining registration certificates by prospective miners. Before June 2016 Kadoma Mining District which was also servicing Chakari, used to handle all administrative issues but the restructuring of the Ministry of Mines that saw the creation of Provincial Mining Directorate saw all the administrative issues of the former Kadoma Mining district being moved to Chinhoyi. Whereas the former Kadoma mining District Offices were just 36 kilometers from Chakari, the offices in Chinhoyi are now a further 100km from Kadoma and this entails travelling more distance and forking out more money for the prospective miner. The artisanal/ illegal miners complained during focus group discussions that they do not have the money for travelling and the patience of making follow ups to Chinhoyi on their application papers, preferring to rather remain illegal miners.

4.6.6 Environmental Management Act and Mineral Rights Acquisition.

The Environmental Management Act has its own contributions on failure to acquire mineral rights by prospective miners. Miners are discouraged from acquiring mining licenses by the laborious and tedious process of Environmental Impact Assessment as well as the high fees for acquiring the Environmental Impact Assessment (EIA) Certificate which is a pre-requisite for commencing mining operations. The EIA Certificate costs US\$250.00 and is valid for just one calendar year and penalties for operating without an EIA range from US\$1000 to US\$5000. This has taken the steam out of prospective legal miners.

As a result of the foregoing, people in Chakari have resorted to illegal mining and this has adversely affected their livelihoods in a huge way. Their livelihoods cannot develop sustainable levels because they are always at risk of losing their gold to corrupt Police officers. Artisanal/ legal miners also noted that besides the risk of losing their gold, they cannot develop their illegal mines placing their livelihoods in a precarious situation.

4.7 The Role of Politics in the Mining Industry

Politics has permeated the whole spectrum of mining in Zimbabwe, particularly in Chakari which is dominated by the ruling ZANU PF party supporters. The influence of party politics is most evident during the gold rush periods. Syndicates are organized along party structures lines. In fact due to the fact that the dominance of ZANU PF in Chakari is well known, even those from other political parties temporarily assume membership of ZANU PF in order to gain access to the gold fields. The influence of politics in mining activities also manifest in disputes issues where the ZANU PF party leadership hierarchy is very active in assisting its supporters with technical and financial

support whenever they are involved in a mining dispute. ZANU PF affiliated organisations like the Affirmative Action Group also assist illegal/artisanal miners to acquire necessary support in their operations. In large scale mining industry, the hand of politics is most visible in the recruitment of employees where the ruling party has seconded some of its supporters for employment at Golden Valley especially in unskilled departments.

4.8 Summary

Observations have been noted to the effect that Chakari community is predominantly a mining and farming area and that people livelihoods are largely dependent on these two important economic activities. Comparatively of the activities, mining has proved to be the dominant one in terms of its influence on people's livelihoods. Mining proved to play a critical and important role in shaping the people's livelihoods as almost everyone including farmers, vendors, retailers and sex workers depend on gold mining. The livelihoods of these people have developed around gold exploitation which has made it possible for them to acquire important assets, enough food requirements and other socio-economic needs.

The availability of abundant gold deposits in Chakari and its critical role in developing livelihoods of the people does not mean everyone who is carrying mining activities has legal rights to do so. First and foremost, this Chapter laid bare the fact that there are three categories of people who have direct interaction with gold mining in relation to mineral rights. The first category is of those who possess exclusive mineral rights and exploiting the gold in accordance with the dictates of the mining law. These are small

scale miners and large scale miners. Two companies namely the Falcon Gold and Golden Valley Mine were the only two companies falling within the category of large scale mines with exclusive mineral rights.

The secondary category of mineral holders was found out to be contract or Tribute Agreement holders who in all terms fit to be described as quasi- mineral rights holders. These do not have exclusive mineral rights and are at the mercy of the grantor who can withdraw the tribute agreement at any given moment or change its terms without consulting the relevant ministry. The Tribute Agreement holders are subject to the mining conditions set out by the grantor. Quite a few number of people in Chakari fall within this category.

The last group or category of people in relation to mineral rights was observed to be those without mineral rights. These constitute the majority of people who have direct interaction with gold mining in Chakari and are dubbed Artisanal/ illegal gold miners. Due to lack of mineral rights artisanal/illegal miners do not have established mines and are highly mobile. As such they cannot develop their workings into productive mines that can attract investment as well as government aid. Despite the fact that their activities are highly rewarding due to the stability of gold prices, sometimes they lose all their gold to rogue police officers who take advantage of their illegal mining activities to confiscate their gold. These factors make their livelihoods vulnerable still.

MMA and EMA have contributed significantly to failure by artisanal and illegal miners to acquire mineral rights. The two policies have prohibitive fees regimes that makes it difficult for an ordinary prospective miner to apply for a mining certificate.

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The recommendations emerging from this chapter will go a long way in influencing policy change and transform artisanal/illegal miners into fully fledged productive miners with exclusive mineral rights. The preceding chapter revealed that three categories of mineral rights holders exist in Chakari namely exclusive holders, quasi-holders and non-holders of mineral rights. The majority of Chakari community members were seen to be operating illegal artisanal gold mines.

5.2 Summary

The study was focused on establishing the relationship between mining and livelihoods development in Chakari, Zimbabwe. It also sought to establish the extent to which the current Zimbabwean mining policy, institutional and legal frameworks impact on acquisition of mineral rights by the people in Chakari and how this affect their

livelihoods. The research captured the narratives of 20 artisanal/illegal miners, 20 farmers and the views of 30 households in order to get their experiences and expectations. Key informants such as community leadership, Ministry of Mines, Ministry of Lands, councilors, House of Assembly member and the District Administrator were also interviewed in order to corroborate information given by the units of analysis.

Focus group discussions with artisanal/illegal miners and farmers were used as major data collection instruments. Self-administered semi-structured questionnaires were also employed to tap information from households. These methods were very effective and efficient in collecting quality data on mining rights and livelihoods development. Formal interviews were used to gather information from all the key informants.

Artisanal/illegal miners, farmers and households all affirmed the importance of mining to their livelihood development. They confirmed the existence of a symbiotic relationship between mining and livelihoods by alluding to the fact that mining has made it possible for them to acquire assets and enough money for food and other socio-economic requirements necessary for their survival and as a result transforming their livelihoods for the better. The majority of the respondents despite the influence that gold mining have on their livelihoods, however, do not possess mineral rights exposing their livelihoods to some vulnerabilities and uncertainties. The major impediments to acquisition of these mineral rights are exorbitant charges demanded by the Mines and Mineral Act and the Environmental Management Act in order to establish a working mine as well as the bureaucratic systems faced by poor applicants of mining rights. The research made wide reference to the property rights theory which O' Driscoll and

Hoskins (2003) argues that prosperity and property rights are inextricably linked. Due to lack of the right to minerals, the development of the livelihoods of the artisanal/illegal miners was found to be very limited.

5.3 Conclusions and Emerging Issues

The research exposed the dual face of the private property rights in relation to livelihoods development in Chakari. The first side of the private property rights is that it can actually be a hindrance to the development of people's livelihoods. This is in relation to the fact that vast mineral claims which are considered private property are owned by few rich individuals and big rich mining companies who have the capacity to acquire as much claims as they want. There is no more free space left for new claims in Chakari because much of the land is covered by numerous private claims some dating back to the 1960s belonging to big mining companies and few individuals who hold these claims for speculative purposes at the expense of the majority poor.

The other side of private property rights is that they can actually lead to development of livelihoods as a result of a guaranteed security of tenure. Mineral rights, which are themselves part of private property rights, could be the only much needed solution to ensuring a sustained, solid and developed livelihoods for the people of Chakari. Mineral rights can entail access to lines of credit, attraction of investment partners and employment of proper mining methods resulting in secure and developed livelihoods. Without these mineral rights artisanal miners have no future as they will always at risk of losing their gold and getting arrested. The greatest challenge associated with lack of

proper extraction resources in which the illegal miners lack the proper resources has been tackled at a governmental and private sector level.

Property rights are vital for investment. Golden Valley Mine, which is a private mining entity, has been able to expand its operations and employing 800 whose livelihoods depend on the continued operation of the mine chiefly because the shareholders have not hesitated to invest a lot of money as a result of their confidence in the security of their private property.

5.4 Recommendations

Having realized the importance of mining as a vehicle for livelihood development in Chakari, and having established that without mining rights the livelihoods of the people in Chakari are precarious and under threat, this research came out with a package of recommendations that can help solidify the livelihoods of the people of Chakari. These recommendations are categorized into policy influenced recommendations and administrative based recommendations as follows:

- There is need for a holistic review of the Mines and Mineral Act of Zimbabwe in particular its tariff and fees regime which need to be pro-poor. The downward review of these tariffs and fees required to establish and maintain a working mine would go a long way in encouraging formal mining as it would become cheaper to acquire mining licenses. The downward adjustment of the mining license fees

should be followed by an upward review of penalties for illegal mining and illegal possession of gold.

- Through the Indigenization and Economic Empowerment Act, the government should repossess all idle mining claims being held for speculative purposes and compensate the owners appropriately. A certain percentage of these claims should then be reserved for the locals.
- Where private claims overlap into farming land, the Mines Act should be amended to compel miners to offer reasonable mining shares to the farmer who should buy those shares at a reasonable proscribed price in order to avert farmer/miner conflict and encourage peaceful co-existence.
- Opencast mining on all prime agricultural land must be outlawed.
- Big private mining companies that are operating at full capacity are employing many locals and have a sound and progressive social corporate responsibility policy should be exempted from ceding the **51** percent shareholding of the company to indigenous players. Rather, these companies should be accorded a special lower variation of this 55 percent threshold as an incentive to these companies who are already sustaining the livelihoods of its employees through a stable monthly salary and guarantees of a life pension.
- Tribute Agreements should be made to last longer and the conditions made favorable to the tribute holder so as to encourage more people to apply for the tributes. The Tribute Agreement should be designed to be bankable and useable as collateral.

- Administratively, the Mines offices should be decentralized to district levels and sub-offices should be established at service centers as a way of limiting travelling hustles and easing of access to services.
- Regular and affordable mining courses should be conducted in every mining district on regular intervals in order to equip every miner with basic requisite skills of best mining practices.
- The Ministry of Mines and EMA should be merged to establish a one stop shop facility where all EMA requirements relating to mining should preferably be under the Mines jurisdiction.

References

- Abawi, K. (2013). *Data Collection Instruments, Training In Sexual and Reproductive Health*, Geneva.
- Abele, A. (2014). *Livelihood Development in Africa*: New York. Columbia University Press
- Abeyrathne, E.M (2003). *Livelihood Development*. Retrieved 19-03-2017 (Available on Indigenization and Economic Empowerment Act of Zimbabwe, (2007).
- Acemoglu, D. (2003) *The form of property rights: Oligarchic vs. democratic societies*. NBER Working Paper No. 10037.
- Acharya, A. (2011). *Human Security: Global Politics and Governance*: New York. British Library Pres.
- Adjei, E. (2007). *Impact of Mining on livelihoods of rural households; A Case Study of Farmers in the Wassa Mining Region, Ghana*. Norwegian University of Science and Technology.
- Agyemang, I & Ontoyin, J. (2014). *Environmental and rural livelihoods implications of small-scale gold mining in Talensi-Nabdam Distrcts in Northern Ghana*, Ghana.
- Amin, M. (2005). *Quantitative Research Methods*.
- Annum, G. (2016). *Research Instruments for Data Collection*, KNUST.
- Austin, G. (2010). African Economic Development and Colonial Legacies, *Graduate Institute of International and Development Studies*, Geneva.
- Becker, S & Bryman, A. (2004). *Understanding Research for Social Policy and Practice: Themes method and approaches*, Bristol, Policy Press.
- Beglin, G. (2007). *African Politics in Retrospective*: London. Prentice House.
- Besley, T. & Maitreesh, G. (2010). Property Rights and Economic Development, *Timothy London School of Economics, Vol. 5, the Netherlands: North-Holland*, 2010, pp. 4525-4595.
- Braun, V. & Clarke, V. (2006). Using Thematic Analysis in Psychology, *Qualitative Research in Psychology*, 3.
- Bury, J. (2005). Mining Mountains: Neoliberalism, Land Tenure, Livelihoods, and the New Peruvian Mining Industry in Cajamarca Environment and Planning, *Volume 37*, 221-239.
- Castillo, J. (2007). *Systematic Sampling*.

Chikomo, A. (2016). *African Human Rights Architecture Ion the 21st Century: The Case of the Sadc Tribunal and Its Effectiveness in Addressing Human Rights*. University of Zimbabwe.

Chikuni, T. (2009). *Gold panning and its role within Sustainable rural livelihoods in Zimbabwe: A Case of Mutasa District*, Mutare, Africa University.

CourthouseDirect.com (2005). *Unearthing Mineral Rights: An Insider's Guide to Searching Titles for Mineral Rights*.

Edwards, J. (2012). *Human Security: London*. Prentice House.

Elliot and Associates, (2005) *Guidelines for conducting a focus group discussion*, Duke University.

Emerald, B. (2008). *Property Rights and Development*: New York. Grabs Printing House.

Fairfax County, (2012). *Overview of Sampling Procedures*.

Fermin-Seller, K. (1995). *The Politics of Property Rights*, Indiana University. Retrieved at <https://www.jstor.org/stable/>.

Gates, G.C. (2016). Oil field Unitization: Contractual Failure In The Presence Of Imperfect Information, *American Economic Review* 75: 368–385.

Gist, J. (2015). Institutional Environment and the Mechanism of Governance: The Impact of Intellectual Property Protection on the Structure of Inter-firm Alliances. *Journal of Economic Behavior and Organization* 38: 283–309.

Hongoris, J. (2009). *Property Rights Theories*. London. Prentice House.

Jamson, B. (2004). The Resource-Based View within the Conversation of Strategic Management, *Strategic Management Journal* 13: 363–380.

Keller, M. (2011). *Human Rights and Human Security*: New York. Ted House.

Keppel-Jones, A. (1983). *Rhodes and Rhodesia: The white Conquest of Zimbabwe, 1884-1902*, McGill- Queens' University Press.

Kim, J., & Mahoney, J.T. (2005). Property Rights Theory, Transaction Costs Theory, and Agency Theory: An organizational Economics Approach To strategic Management Managerial and Decision Economics manage. *Decisions Econ.* 26: 223–242 (2005) Wiley Interscience.

Kondo, T & Makaza, T. (2014). *Human Security Deficit in Southern Africa*: Harare. Ansa Publishers.

Libecap, C. (1989). *Property Rights Theory*. Retrieved at <https://www.business.illinois.edu/>

Lobiondo-Wood, G & Haber, J. (1998). *Research Pathways*, University of Tennessee.

Lua, J & Lora-Wainwright, A. (2005). *Historicizing Sustainable Livelihoods: A Pathways Approach to Lead Mining in Rural Central China*: Oxford. Oxford University.

Matyszak, D. (2014). *Madness and Indigenisation: A History of Insanity in the Age of Lawlessness*. Harare, Zimbabwe: Research and Advocacy Unit.

Meyer, N.P. (2007). *Property Rights Theory*: London. Prentice House.

Mineral rights ownership – what is it and why is it so unique in the USA? Retrieved 19-03-2017.

Mines and Minerals Act of Zimbabwe.

Moor, N. (2003). A simple Method to estimate sample sizes, National Institute of Health.

Nester, R. (2007). *Mineral Rights and Economic Development*: New York. Columbia University Press.

Nhambura, J. (2015). *Chakari: Bedrock of artisanal mining*, Constituency Watch, Harare, Zimbabwe.

North, D.C. (1990). *Institutions, Institutional Change and Economic Performance*: New York. Cambridge University Press.

Odriscoll, G & Hoskins, W. (2003). *Property Rights: The Key to Economic Development*, CATO Institute.

Sarantakos, G. (1998) *Introduction to Qualitative Research*.

Snyder, R. (2015). *Mineral Rights, Department of Environmental Quality Dan Wyant, Director State of Michigan, Governor*. Retrieved 19-03-2017.

The United Nations Universal Declaration of Human Rights 1948.

United Nations. (1994). *Human Security at the UN*.

Vyver, J.D. (2012). *Nationalisation of mineral rights in South Africa* Department of Private Law, University of Pretoria, 2012 De Jure.

Van W, B. (2012). Research Design and Methods, Part 1, University.

Vause, D. (2001). *Research Design in Social Research*, SAGE, London.

Wagner, G. (1993). Biological Samples.

APPENDICES

APPENDIX 1: Interview guides

1. Interview guide for Local Leadership

1. What are the main economic activities taking place in this village/ constituency?
2. What is the state of infrastructural development in this ward/wards?
3. Are the social services in this area accessible?
4. What are the problems being encountered by farmers?
5. What are the problems being encountered by the miners?
6. Which main economic sector sustains the people in this village and why?
7. Are the local people economically empowered?
8. Who owns most of the mines?
9. How much has mining and agriculture contributed to the development of this area?
10. What do you think should be done to develop this constituency fully?

2. Interview Guide for Ministry of Mines

1. What are the challenges brought about by the land reform program on mining activities in Chakari?
2. Are there any mining related disputes found in Chakari?
3. How have you solved the disputes?
4. What is the future of mining in Chakari in particular and Zimbabwe as a whole?
5. What are the legal challenges that confront mining as a whole?
6. What is the government's position regarding artisanal mining?
7. How much gold reserves does Chakari have?

8. How rampant is artisanal mining in Chakari?
9. How many gold mining claims are owned by foreigners in Chakari?

3. Interview guide for Land Authorities

1. What are the problems being faced by a) communal farmers?
b) A1 plot holders?
c) A2 plot holders?
2. What is the relationship between farmers and miners in your area?
3. What is the relationship between the Land Act and the Mines and Minerals Act?

B. Focus Group Discussion

1. Interview Guide for Focus Group Discussion with Miners

1. What are the operational challenges that you face at your mine?
2. Have you ever encountered any legal challenges during the course of your operations?
3. How did you become a miners?
4. How have you benefited from gold mining?
5. What level of support do you get from the government and other NGOs?
6. What is your understanding of the mineral laws of Zimbabwe and are they sufficient enough to promote the indigenous miners?

7. How can miners contribute towards the economic development of the country in general and Chakari in particular?
8. What recommendations do you proffer regarding mining issues?

2. Interview Guide for Focus Group Discussion with Farmers

1. How has farming improved your lives?
2. What are the challenges that you face as farmers?
3. Are there some gold claims on your farms and if so what is the nature of your relationship with miners?
4. Do you produce for commercial purposes or for consumption purposes?
5. If for commercial purposes what is your average revenue?
6. If for consumption purposes where do you get money for other needs?
7. Are there any gold deposits on your land?
8. Are there any mining activities on your land?
9. Are you involved in the mining activities?
10. Who is carrying out the mining activities?
11. If it is you, do you have any license to carry out any mining activities?
12. Have you ever carried out any mining activities elsewhere?
13. How much do you get from the mining activities?
14. What are your recommendations to the government regarding your challenges?

C. Semi- structured Questionnaires for Households not involved in either Mining or Farming

SECTION A

1. What is your gender? MALE/FEMALE.
2. Are you married? YES/NO.
3. How many members are in this household?.....
4. Do you reside in Chakari? YES/NO. If yes for how long?.....
5. What is the highest level of education that you have attained? Tick the answer.
 - a) Primary level
 - b) Secondary level
 - c) Tertiary level

SECTION B

6. Are you employed? YES/NO. Delete the inapplicable.
7. Were you once employed? YES/NO. If yes where and when?.....
8. What do you do for a living? VENDING/ RETAILING/OTHER. If you say other
please
explain.....
.....
9. Who are your main customers?
10. What is your average income per month?.....

11. How much money do you require per month to support your family and other dependents?.....
12. How do you use the income that you generate? Explain
13. Have you acquired any assets from your source of income YES/NO
14. List the assets that you have acquired as a result of the income generating activity you are doing below

SECTION C

15. What is the main economic activities in Chakari? 1. Mining. 2. Farming. Delete the inapplicable.....
16. Have you ever been involved in mining before in Chakari? YES/NO. Delete the inapplicable. If yes explain in detail and answer question 12.....
17. Did you have any legal documents to mine? YES/NO. If answer is no give reasons why.....
18. Have you ever been involved in farming before? YES/NO. Delete the inapplicable. If yes explain in detail
19. Do you have relatives involved in mining in Chakari? YES/NO. Delete the inapplicable. If yes explain how are they involved?.....
20. What problems would you like the government to address that are in your area?.....

21. What solutions do you proffer for those problems?.....

22. What are your views on the government's Indigenization drive.?.....

APPENDIX 2: AUREC approval letter



(A United Methodist-Related Institution)

INVESTING IN AFRICA'S FUTURE

P.O. BOX 1320, MUTARE, ZIMBABWE • OFF NYANGA ROAD, OLD MUTARE • TEL: (+263-20) 60075/60026/61611 • E-MAIL: aurec@africau.edu • WEBSITE: www.africau.edu

AFRICA UNIVERSITY RESEARCH ETHICS COMMITTEE (AUREC)

Ref: AU499/16

February 08, 2017

Michael Washaya
College of Business, Peace, Leadership and Governance
Africa University
Mutare

RE: Mineral Rights for livelihood development in Chikari, Zimbabwe.

Thank you for the above titled proposal that you submitted to the Africa University Research Ethics Committee for review. Please be advised that AUREC has reviewed and **approved** your application to conduct the above research.

The approval is based on the following.

- a) Research proposal
- b) Questionnaires
- c) Informed consent form

- **APPROVAL NUMBER** AU499/16

This number should be used on all correspondences, consent forms, and appropriate documents.

- **AUREC MEETING DATE** NA
- **APPROVAL DATE** February 08, 2017
- **EXPIRATION DATE** February 07, 2018
- **TYPE OF MEETING** Expedited

After the expiration date this research may only continue upon renewal. For purposes of renewal, a progress report on a standard AUREC form should be submitted a month before expiration date.

- **SERIOUS ADVERSE EVENTS** All serious problems having to do with subject safety must be reported to AUREC within 3 working days on standard AUREC form.
- **MODIFICATIONS** Prior AUREC approval is required before implementing any changes in the proposal (including changes in the consent documents)
- **TERMINATION OF STUDY** Upon termination of the study a report has to be submitted to AUREC using standard form obtained from AUREC.

Yours Faithfully

MITI G.P. AUREC Administrator
FOR CHAIRPERSON, AFRICA UNIVERSITY RESEARCH ETHICS COMMITTEE

AFRICA UNIVERSITY
RESEARCH ETHICS COMMITTEE (AUREC)
08 FEB 2017
APPROVED
P.O. BOX 1320, MUTARE, ZIMBABWE

