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FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING

AN EVALUATION OF ENVIRONMENTAL AND SOCIAL ACCOUNTING OF DIAMOND MINING COMPANIES IN ZIMBABWE: A CASE OF MARANGE RESOURCES (PVT) LTD (CHIADZWA).

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SUBMITTED TO FACULTY OF COMMERCE DEPARTMENT OF ACCOUNTING IN PARTIAL FULFILMENT OF BACHELOR OF COMMERCE ACCOUNTING HONOURS DEGREE.

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RELEASE FORM

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APPROVAL FORM

The undersigned certify that they have read and recommended to the Midlands State University acceptance of a project /dissertation entitled; **“An Evaluation of Environmental and Social Accounting and Reporting of Diamond mining companies in Zimbabwe: Case of Marange Resources (Pvt) Ltd”** submitted by **Ability Singe**, student reg. number **R104799N** in partial fulfilment of the requirements for the Bachelor of Commerce (Hons) degree in Accounting.

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DEDICATION

To my beloved family, my mother and father, my brother and sisters for their support, patience, advises and love .May the almighty GOD abundantly bless you.

ACKNOWLEDGEMENTS

My gratitude goes to God my Father and the Father of all mankind. He who has graciously given me life and all privileges, He enabled me to engage in and successfully complete this project.

May His Name be exalted forever?

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ABSTRACT

The study investigated best practice of environmental accounting among companies currently operating in Chiadzwa Mutare specifically Marange Resources (Pvt) Ltd. Precisely, the study assessed the level of independence of tracking of costs impacting on the environment; level of efficiency and appropriateness of environmental costs and disclosure reporting. The study used research instruments such as primary data survey and secondary data elucidation. For this purpose, longitudinal content analyses were carried out. Mode technique is the statistical technique used for the research. Discoveries are that environmental operating expenditures are not charged independently of other expenditures. There is also, absence of costing system for tracking of externality costs. Considering the current limited exposure of many organizations to environmental accounting methodology, this study proffers an insight into new bases and design for environmental accounting. Recommendations among others are that corporate organizations should develop Plans and Operating Guidelines that they may use for their operations.

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LIST OF ACRONYMS

AFS	Annual Financial Statement
CER	Corporate Social Reporting
CSR	Corporate Social Responsibility
CFP	Corporate Financial Performance
CSER	Corporate Social and Environmental Reporting
CSP	Corporate Social Performance
EIA	Environmental Impact Assessment
EMA	Environmental Management Agency
GAAP	Generally Accepted Accounting Practice
GRI	Global Reporting Initiative
ICAZ	Institute of Chartered Accounts of Zimbabwe
SEA	Social and Environmental Accounting
SER	Social and Environmental Reporting
SHE Dpt	Security Health and Environmental Department

CHAPTER 1

INTRODUCTION

1.1 Chapter Introduction

Chapter one explores the background of the study, research problem and what the research aims to achieve at the end of the research. It further looks at the research questions, justification or significant of the study and delimitations and limitations of the study. Also included in this chapter will be the theoretical framework, definition of terms and finally the chapter summary.

1.2 Background to the study

Ethical reporting of companies turn out to be predominant since mid-1980s, the term ethical reporting covers reporting on all that is social reporting and environmental reporting. Specifically in 1987 UN Commission on development of the environment made it clear that development of the economy frequently resulted to worsening not enhancement in the standard of living of peoples. In 1987, the United Nations Commission on environment and development (the Brunt land Commission) drew attention to the fact that economic development often leads to deterioration not improvement in the quality of people's lives. According to UN World Commission on environment and development 1987, p. 8 " the commissioner called for a practice of sustainable development which meets the needs of the present without compromising the ability of future generations to meet their own needs. "The commissioner strongly highlighted that there are two fundamental issues; firstly development is not just about bigger profits and higher standards of living for a minority. It should be about making life better to everyone. Secondly, development should not involve the destruction or the exploitation of the natural resources nor should it take part on environmental pollution.

In today's globalised economy, companies have turn out to be too competitive and are even using unscrupulous means to out compete each other in the race. The greatest concern these days

have been on the effect of environment that these companies are putting to earn higher revenues and increasing their competitive edge. Thus, government, non-governmental organizations as well as the general public are progressively putting pressure on the companies to become responsible towards the environment and invest extensive amount of money and effort to protect the environment.

As a result, the matter of protection the environment has gained prominence throughout the world in the past few decades, which has in turn made it important for companies to re-think their accounting structure and emphasize on accounting for the social and environmental aspects and other related issues in the annual reports and management decisions. A sequence of pressure has increased on business in recent years however in the midst of this is the belief that business are inhabitants of society in that they benefit from the society and so owe duties back to society in the same way that individuals human citizens do. A lot of people no longer accept as true that business are able to harvest from the society without accounting back to the society (not just to shareholders), on how it has behaved with regard to its environmental impact. Thus, the need of the hour for companies are not just analyzing financial data but also to take into account various social and environment-related information in the end of the year results.

The subjects related to social and environmental accounting has gathered greater media and public attention in the past few decades due to major incidents like the Exxon Valdez in Alaska oil spill of 1989 and the Bhopal chemical leak of 1984. These incidents were not just individual corporate disasters but in fact became global talking points which in turn steered the attention of the world towards issues such as global warming, climate change, fast depletion of fuel and other non-renewable resources, deforestation and the loss of natural habitats (Adams 2004).

Social and Environmental aspects ,falls out of the traditional role of the accounting which focuses mainly on recording and reporting financial information hence accounting is currently encountering a challenge to account for these. The traditional or the conventional accounting function of commercial organisations have stood founded on the accounting entity, measurement of the commercial proceedings in monetary terms and users of the financial reports who are anxious with the financial consequences of the firm on business performance and position.

Environmental and Social accounting is considered as an addition of conventional accounting which mainly deals with financial aspects report.

Environmental and Social accounting means an extension of disclosure into non-traditional areas such as providing information about employees, products, community service and the prevention or reduction of pollution. However, the term social accounting is also used to describe a comprehensive form of accounting which takes into account externalities. Public sector organisations may also be assessed in this way, although most writers on the subject of social accounting appear to be worried with private sector organisations.

The diamond mining operations at Chiadzwa are anticipated to become the main source of revenue generators for the Zimbabwean economy (Honourable Minister of Finance Patrick Chinamasa in his presentation of the 2013 Budget Review in Victoria Falls). Currently seven companies are mining diamond in Chiadzwa namely Marange Resources (Pvt) Ltd, Mbada Diamonds, Gyn Nyame Resources, Jinan Mining Ltd, Anjin Investment Ltd, Diamond Mining Company and Kusena Diamonds. The extractions and explorations of these companies led to the main focus of conventional accounting reporting since many people are mainly concerned with how much revenue is being realised and remitted to the treasury. In actual fact there is need to also account for the Social and environmental aspects of these mining companies.

There are many concerns regarding the issues of land, air and water pollution by these mining entities as well as the impact of corporate social responsibility in the communities where they are conducting their operations. Mining companies are supposed to comply with the Environmental Impact Assessment Laws (EIA) and Environmental and Management Agencies (EMA). These bodies are important for assessing the potential environmental, social, economic and environmental impact on projects (impact on community livelihoods critical).

There is also the issue of environmental degradation, examples include water pollution of the Odzi River, siltation of local dams, dusts and vibrations caused by dump trucks (Villages allege that these cause miscarriages, many fruit trees are now barren and houses and school buildings on the roadside are cracking). Furthermore the mining activities are causing destruction and disturbances of the ecosystem and habitants, and in area of farming it is disturbing and destroying productive grazing and croplands. The Zimbabwe Environmental Law Association (ZELA) and

villagers living along Save River have sued three diamond mining companies operating in Marange for pollution. The Zimbabwean Standard News Reporters reports that an application have been lodged with the High Court to stop Marange Resources, Anjin Investment and Diamond Mining Corporation (DMC) to stop polluting Save, Singwizi and Odzi rivers with sewage, chemicals and metal deposits.

In a Biological and chemical study carried out by University of Zimbabwe on behalf of Zela showed that villagers are at risk of contracting cancer and other diseases because the companies are dumping dangerous chemicals into the three rivers. The results of the study shows the rivers have a higher concentration of iron, chromium and nickel in the water, elements which are the major constituents of ferro-silicon (FESI), a chemical compound used in diamond extraction. Environmental and social accounting which can assist in meeting this challenge is an exclusive field of accounting, but represents a broader term that relates to the provision of relevant firm-level environmental and social performance information to the internal and external stakeholders (Bennet and James 2000; Deegan 2003).

1.3 Problem statement

Conventional approaches of cost accounting have become inadequate since their practices have ignored important environmental costs and activities impacting consequences on the environment. Despite current conventional accounting reporting which mainly deal with the financial aspects such as profitability, losses, capital appreciation, cash flows and taxations, ignores that there is also need to report on the social and environmental aspects, Social and Environmental accounting (Mauders & Burrit; 1991; Gray et al, 1996; Gray & Bebbington, 1998).

Corporate neglect and avoidance of environmental costing leaves gap in financial information reporting. There is no completeness and correctness of fair view to users of financial information such as shareholders, environmental regulatory agencies, environmentalists and potential investors. Accordingly the argument is that the current mining accounting systems being used by

Marange Resources (Pvt) Ltd is deficient in promoting ethical awareness of which social and environmental accounting concerns are part of this.

1.4 Research Objectives

- To evaluate whether the Reclamation and Closure Plans offered by mining proponents in Chiadzwa (Marange Resources (Pvt) Ltd) is adequate.
- To find out the importance of social and environmental accounting disclosures for mining companies in Chiadzwa.
- To suggest strategies for improving and influencing the reporting of social and environmental accounting of mining companies in Chiadzwa.
- To ensure that the financial statement of companies mining in Chiadzwa are complete and they can be of value to users of those financial statements.
- To suggest drivers and motives which can be used by Environmental Management Agency (EMA) to persuade social and environmental disclosure by companies operating in Chiadzwa

1.5 Research Questions

- What measures are being put in place to ensure that social and environmental accounting disclosure or reporting is being influenced to diamond mining companies?
- What developments or improvements need to be made to ensure that there is reporting and disclosure of environmental and social accounting aspects?
- To what extent are environmental operating expenses tracked independently of other operating expenditure.
- To what extent is the Environmental Management Agency (EMA) effective in regulation of environmental matters.

- What measures are being put in place to ensure that every company operating have a Reclamation and Closure Plan?

1.6 Significance of the study

This study is going to be done in partial fulfilment of the requirements of a B.Com Accounting Honours Degree in at Midlands State University and will provide the researcher with the research skills for future academic and scientific researches.

To diamond companies in Chiadzwa

The importance of this study is to engross corporate organisations in Chiadzwa to adequately provide for social and environmental protection in their internal policies on investments and projects which will impact on the environment and the community. This approach will facilitate protection of the eco-efficiency and competitiveness among corporations in all mining sectors of the economy. This study will also assist in efficient cost valuation of environmental and social remediation and compensation to affected communities particularly those in Chiadzwa by corporate bodies impacting on the environment.

To Zimbabwe

To design conceptual bases for environmental and social accounting and disclosure in corporate financial statement this will facilitate efficient valuation of degradation in affected communities. Besides, it is beneficial to corporate organisations as ethical investors and the environmentally conscious general public will watch out for ethically responsible companies. The study will assure commitment of the corporate organisations in Zimbabwe to international agreements on environmental regulations which will in turn assure sustainable development of the environment and the ecosystem in Zimbabwe as opposed to just degradation.

The study should stimulate national policies and programmes for effective transfer, access and development of environmentally sound technologies in line with Kyoto protocol requirements in Article 10 and also specified in Article 4 par 1 (c) of the United Nations framework on climatic change (1992). This study is relevant for improved System of National Accounts (SNA) for

National Income computations considering social and environmental aspects. It will further research on social and environmental accounting.

To the University

The project should aid the University to conduct further studies for Environmental and Social accounting and reporting. This will help the University to evaluate on Environmental and social accounting issues and recommend ideal solutions to the study.

Assumptions

In order to carry out the study, the researcher made the following assumptions:

- a) The research will be carried out and be finished within the time limits.
- b) All provided information will be treated with utmost confidentiality.
- c) The researcher will get free and unbiased information from the interviewed persons.
- d) The researcher will get enough support and co-operation from all respondents' authorities.
- e) Subjects that are to be issued with questionnaires or interviewed are well versed with the research topic and will respond to all questions.

1.7 Delimitations

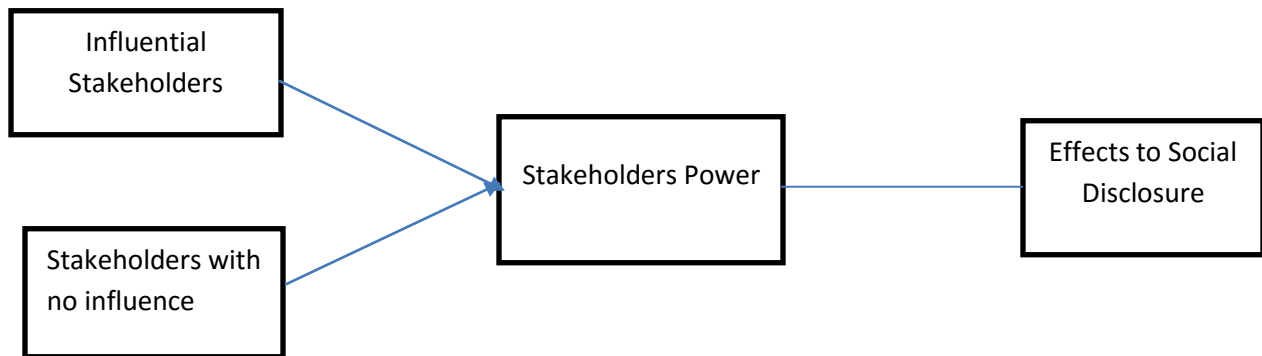
The research will be limited to the geographical area of Chiadzwa in Mutare as it is the area where the mining activities are being conducted. The target population will also be the people in the communities of Chiadzwa, Marange Resources (Pvt) Ltd, the Environmental Management Agencies and the Zimbabwe Environmental Law Association (ZELA). Also the research is to be carried out in a shorter period of time.

1.8 Theoretical/Conceptual framework

The framework is put in place to ensure the readers that the type of research and investigation under study are not based solely on the researchers personal instincts or guesses, but rather are informed by established theory and empirical facts obtained from credible studies. Authors such as Gray, (2002), Parker (2005), Adams and Larrinaga (2007) or Bebbington *et al.* (2008) all approve on the significance of emerging the theoretical pillars of Social Accounting. In the midst of other cases, this may refer to the significance of appreciating, amplification and forecasting the procedure of social information disclosure by firms, applying well-known and proven conceptual pillars for that purpose, such as Stakeholder Theory (Gray *et al.* 1996; Deegan, 2002).The researcher is going to make use of the theory to put across the relationship between the organisation stakeholders power and environmental disclosure. The Stakeholders Theory is well-thought-out as among others one of the utmost significant conceptual framework in the arena of Environmental and Social Accounting (Gray *et al.*1996).

Stakeholders Theory put up with the idea that the firms activities are shaped by the pressure exercised on firms by different stakeholders. Accordance to the theory two stakeholders profiles have been put across. Contrary to the line of thinking of the stakeholders' theory, Savage *et al.*, 1991; Clarkson 1995 argues primary stakeholders whose interdependence with the organisation is so high due to which their support is vital for the firm to develop and to stay alive. However there are other stakeholders that regardless of influencing and being influenced by the organisation these stakeholders are not closely connected to the organisation, demonstrate low levels of interdependence and fulfilment of their requirements is further simply disregarded.

Figure 1.1 Conceptual Framework



Source: Adapted from Gray 2006, p.178

The diagram shows the conceptual framework for the Stakeholders Theory, stakeholder's powers being the independent variable and social disclosure being the dependent variable.

1.9 Limitations

It is important to inform any reader that the outcome of this research is likely to be curtailed by the following:

- Confidentiality; some of the respondents were reluctant to disclose information required by the researcher since diamond information is a sensitive and protected area in Zimbabwe and also due to the fact that during the time of the research diamond mining companies were being audited by forensic auditors
- Resources constraints; the researcher will have to travel to and from Mutare so as to collect the required information since the study is limited to Mutare and the researcher will be situated in Gweru.
- Time constraints; the research will be taken within a short period of time thus there would be no much time to conduct an extensive study.

1.10 Definitions of terms

Social and Environmental Accounting

Social accounting which can also be known as social accounting and auditing, social and environmental accounting, corporate social reporting, corporate social responsibility reporting, non-financial reporting or accounting can be defined as a process of communicating the social and environmental effects of organisation economic actions to particular interest groups within society and to society at large. Social accounting emphasises the notion of corporate accountability.

D. Crowther (2002), defines social accounting in this sense as “an approach to reporting a firm’s activities which stresses the need for the identification of social relevant behaviour, the determination of those to whom the company is accountable for its social performance and the development of appropriate measures and techniques. Environmental accounting happens to be an exclusive field of accounting too, it provides reports for both internal use, generating information to help make management’s decisions on pricing, controlling overheads and capital budgeting and external use, disclosing environmental information of interest to the public and to the financial community. Internal use is better termed environmental management accounting (Bartolommeo et al, 2000)

Environmental and Social Accounting reporting

In accordance to Medley, 1997. no page “conventionally the duty of accountants is branded into triplicate: the financial accountant, the management accountant and the auditor. In terms of social and environmental accounting, the financial accountant is primarily interested in social and environmental issues of assets and liabilities and to report on them in some standard ways. The management accountant is concerned with costs and benefits associated with these issues and the auditor in providing verification or assurance of the social account.”

Corporate Social Responsibility (CSR)

Corporate social responsibility can be seen as the activities which enterprises or companies willingly/voluntarily partake which are over and above their own interest, legal requirements, to address both their competitive edge and the interest of the society at large

Stakeholder Theory

Stakeholder theory (Gray, Konhy and Lavers 1995, p 53) asserts that “the corporation’s continued existence requires the support of the stakeholders and their approval must be sought and the activities of the corporation adjusted to gain that approval. The more powerful the stakeholders, the more the company must adapt. Social disclosure is thus seen as part of the dialogue between the company and its stakeholders.

Sustainability Accounting

The term sustainability take countless meanings and definitions, but authors do consider the one given by Crowther (2002) that ‘sustainability’ is concerned with the effect which action taken in present has upon the availability future. Some confusion are also there in defining the aspects of sustainability and analysing sustainable business developments based on whether it should include only environmental performance (Dyllick and Hockerts, 2002) or be similar to Triple Bottom line (TBL) approach (which does consider organisational, social and environmental performance (Spangenberg, 2004).

1.11 Chapter Summary

The chapter give an insight of the background of the study and the problem of the study under review. Assumptions are also put in place in the chapter which without them the study won’t be real and reliable. Definitions of key terms are also given in the chapter.

CHAPTER 2: LITERATURE REVIEW

2.0. Introduction

Literature review is a body text that targets the critical point of current knowledge including fundamental findings as well as theoretical and methodological contributions to a particular topic (Hart C, 2008).

Therefore this chapter focuses on the environmental and social accounting aspects in mining industry worldwide and in Zimbabwe in particular since it is the main area of study. Information will be attained from various sources ranging from published books of social and environmental accounting, journals (local and international), business magazines and newspapers. Also information from electronic journals, reports from Environmental Management Agency Zimbabwe and authentic sources from the internet will be put in to use.

2.1. Purposes of Literature Review

Saunders M ,Lewis P, Thornhill A 2009 , p. 44 states ‘that the foremost purpose of the literature review is to assist you grow a decent appreciation and awareness into applicable prior study and the developments that have emerged’.

Illustration of how the outcome of your findings and theories you have developed relate to the work that was previously done can be seen as well as an addition to the other purposes of literature review. Literature review helps to demonstrate skills in library searching; to show command of the subject area and understanding of the problem to justify a research topic, design methodology.

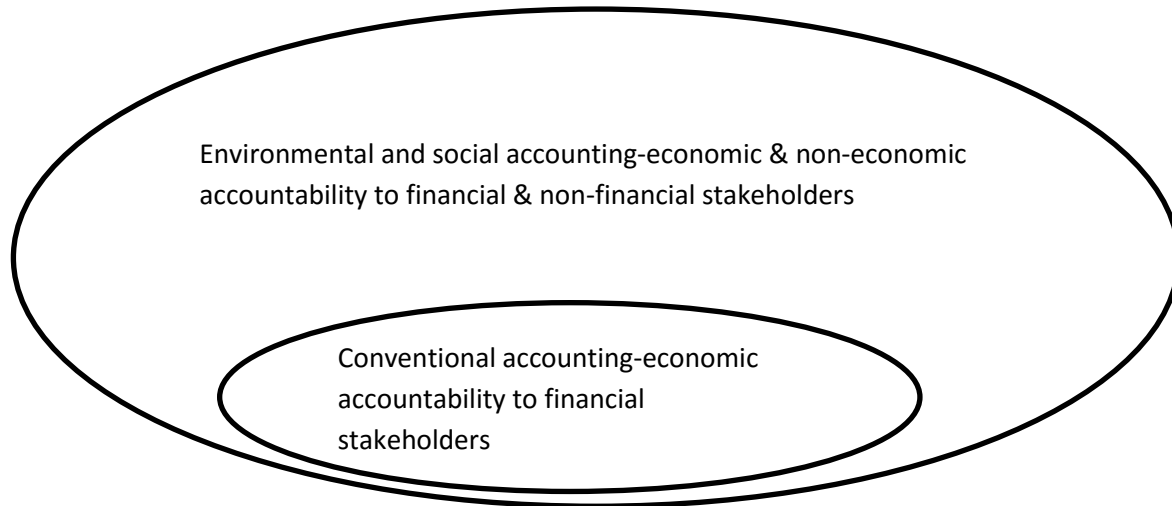
2.2. Definition of Environmental and Social Accounting and Reporting

Environmental and social accounting is somewhat of a wide-ranging term which has developed over year's .Social and environmental accounting involves extending the accountability of entities beyond the traditional role of providing a financial account to owners of capital, specifically shareholders (Gray et al 2007). The extension is from a notion that organisation do have broader responsibilities than simply to make money for the owners of capital (shareholders).Thus Marange Resources (Pvt) Ltd apart from making money from sale of diamond they as well have other wider responsibility such as considering the social and environmental effects of their mining activities. The most valuable and commonly used definition of what is meant by social and environmental accounting (SEA) was provided by Gray et al (2007).They describe SEA as communicating the social and environmental effects of organisations economic actions to particular interest groups within society and society at large.

According to Mallen Baker (2010) SEA is seen as how companies manage the business process to produce an overall positive impact on society. A definition given by the CSR Awards, 2010 para 2 state that SEA is about how organisations align their values and behaviour with the expectations and need of various stakeholders' not just investors and clients but also employees, suppliers, communities, regulators, special interest groups and the society as a whole.

The broadest definition of social accounting was provided by Gray (2002, p 692) as 'the universe of all possible accountings'. Such a broad definition lacks in that it provides no practical guidance but it does highlight the notion that social and environmental accounting does represent a broader, more expansive accounting when compared to the traditional accounting paradigm. As a result the conventional accounting paradigm can be seen as a sub-set of social and environmental accounting as depicted in figure 2.1 below.

Figure 2.1 Accounting Sets



Source: Adapted from Gray 2002, p.692.

According to GRI 2006 no page number ‘corporate environmental reporting (CER) is the practise of determining, revealing and reporting to interior and outside stakeholders the enterprise environmental performance ,so as to attain the objective of supportable development and to allow such participants to evaluate their association with reporting entity’.

2.3. Theoretical Perspective of Corporate Social and Environmental Reporting/Disclosure

To set the scene, the typology of social accounting theories by Deegan and Unnerman (2006) and Brown and Fraser (2006) is used to recognise the theories ordinarily used to study corporate social and environmental reporting CSER .Social and environmental accounting theories include legitimacy ,stakeholder and institutional theories (Deegan and Unnerman ,2006) and shareholder theory (Brown and Fraser ,2006).Equally , it is worth noting “there is an almost infinite array of theories potentially accessible to social science research and to social accounting specifically”

(Gray et al ., 2010, p 3) so much so that Thompson (2007) identified thirty three groups of theories. All the same, there has been a tendency to herd around some of the theories (Gray et al., 2010) particularly in social and environmental reporting (Brown and Fraser, 2006).

Explicitly accounting theories do help us to understand environmental and social reporting by observing for enlightenment why numerous organisation publicly release information about their social and environmental performance, even with the general lack of regulation in this area. That is it helps us realise what inspires firms to publish this information voluntarily. The theoretical structure of numerous accounting studies rely on the legitimacy theory framework to explain why managers voluntarily disclose social and environmental information.

Legitimacy Theory

The theory suggest that entities are expected to act in a socially tolerable manner so as to access resources, gain approval of their goals and places in the society and guarantee continued existence (Guthrie and Parker, 2008). According to Lindbolm 1993, p .2 “organisational legitimacy occurs when an entity’s value system becomes corresponding with the value system of larger social system of the entity” as sited in Janet Luft Mobus (2005) thus improving equally resource source guarantee and trustworthiness of organisational activities.

This theory avows that entities persistently seek to ensure that they are perceived as operating within the bounds and norms of their respective societies (which is dynamic), that is they try to ensure that their activities are perceived by outside parties as being legitimate. Information disclosure is therefore vital to establishing corporate legitimacy (Deegan, 2006 p.275).In the case of Marange Resource it can be argued that the company account for its social and environmental effects in favour of the Legitimacy theory. This argument stems from the opinion that since Marange Resources (Pvt) Ltd is a government operated organisation it strives to operate ethically thus saving bests the interest of the society. Various authors on SER suggest that if the entities adverse effects on the environment are apparent the existing legitimacy of an entity is questioned threatened or challenged.

Social activities would be undertaken and accounted for by an entity under the legitimacy theory that is if and only if management is aware that particular activities were expected by the society in which it operates. It is part of the entity's social contract, or as is often stated by entities part of their license to do business. Failure by entities to embark on the expected activities by the community amounts to breaching of its social contract or making its license for doing business void hence the entity is perceived as no longer legitimate.

These therefore have a negative impact on the support the entity receives from the society and consequentially its survival. It therefore follows that success for an entity under the legitimate theory is impendent on it fulfilling its social contract. Pattern (2003) argues that according to legitimacy theory, social disclosure is a means to deal with the firm exposure to political and social pressure.

An assumption is put across by the theory that society will allow an entity to continue operations up until the firm meets the society's expectation, and normally firms meet expectations to avoid further regulations on operations or ill-will. Management might as well try to change stakeholder's expectations or endeavours to justify their actions if they feel that society's expectations are unrealistic/unreasonable.

An inference can be drawn from the theory viewpoint that social and environmental reporting may be just a tool that entities use to legitimize or justify their operations. Particularly in the case of firms in industries which have extensive environmental and social impacts such as Marange Resources (Pvt) Ltd e.g. mining companies, oil or gas companies or petroleum industry.

Shareholder Theory

It is the obligation of the corporate executive of an entity to perform on behalf of the shareholder as agency governing the entity in a purposeful manner (Smith, 2003). The goal of maximising the shareholder value is the only appropriate goal for managers in the modern corporation (Smith, 2003; Sundaram and Inkpen, 2004). Shareholder theory has been present as the overriding theory in business management and education (Margolis and Walsh, 2003; Saint, 2005), as the dominant concept behind the vast majority of business in capitalist economies

(Saint, 2005) and has a “near religious status” in business management (Phillips, 2003). This dominance is supported by not only the social system such as legal, financial and business education system (Margolis and Walsh, 2003), but also the practicality of its observation and measurement (Sundaram and Inkpen, 2004).

According to Jensen (2003) the shareholder theory argues that any engagement in social activities is outside the theoretical scope of the corporation. The argument stems from the notion that entities cannot have social responsibility because engaging in such activities outside shareholder wealth maximisation is an exercise that in essence involves taxing people and deciding how that tax should be spent. Shareholder theory do not entirely put the society and environment altogether aside, but in its place it advocates for shareholders wealth maximisation within the confines of law and in non-deceptive manner (Smith, 2003). Nevertheless shareholder theory posits that organisation will engage in social responsibility activities insofar as those initiatives are in the best interest of shareholders (Sundaram and Inkpen ,2004). But shareholders payoff is the residual pay ;hence taking care of shareholders involves taking care of all other stakeholders (Sundaram and Inkpen ,2004).

Stakeholders Theory

Apart from the above mentioned theories (legitimacy and shareholder’s theory) stakeholder’s theory frequently appears in the social and environmental literature. Stakeholder theory emphasises on the various stakeholders groups within society (Ratanajongkoletal 2006 p 69). This theory is used ‘as a basis to analyse those groups to whom a firm should be responsible’ (Moir, 2005). A stakeholder is ‘any group or individual who can affect or is affected by the achievement if the organisation objectives (Freeman, 2003). According Freeman (2003) the theory debates that mangers have a moral obligation to consider and appropriately balance the interest of all stakeholders. The theory is the dominant paradigm of corporate social responsibility (Saint, 2005).

According to Wilmshurst (2007, p 3) ‘any individual ‘or group (e.g. employee, customer, community, government and regulators, shareholders, supplier) ‘with an interest in the activities

of the firm would be recognised as a stakeholder whatever their ability to impact on the firm's survival'. Zimbabwe's stakeholders are no exception to this universal group, they might as well have interest in an entity or might be affected by the activities of a company. These stakeholders demand different information and firm will respond to their demands in a variety of ways (Deegan, 2006)

In terms of corporate social reporting the main issue here is "whether stakeholder analysis is part of the motivation for business to be responsible and, if so to which stakeholders?" (Moir, 2005). According to Deegan (2005) stakeholder theory has two branches, which are;

1. The managerial branch
2. The ethical branch

Ethical Branch

This branch argues that all stakeholders have "a right to know about social and environmental implications of an organisation's operations at all times" (Deegan et al 2005). Gray et al., (2010) argues in favour of the idea and said that social and environmental information should be disclosed to all stakeholders.

Managerial Branch

This branch proposes that entities will answer back to those stakeholders who can have an indispensable economic impact upon the organisation (O'Dwyer, 2003) or those who are not directly engaged in the entity's economic activities, but 'have an interest in the actions of the organisation and are able to influence it'. Accordingly stakeholder theory would lead to an expectation that firms would be guided in their reporting of CSR activities either to reflect the plurality of their stakeholders or to address the interest of a few dominant ones. Thus the theory postulates that a company would be expected to respect the powerful stakeholders such as others regulatory powers which might evoke sanctions against non-compliance such as Environmental Management Agency (EMA). In a bid not to be sanctioned for non-compliance by EMA Marange Resources (Pvt) Ltd can choose to account and disclose its social and environmental activities under the managerial branch of the stakeholders theory.

Institutional Theory

Institutional theory is a relatively new viewpoint that assumes that managers of an entity will develop or adopt new practices (such as social and environmental reporting) as a result of a variety of institutional pressures. The theory postulates that managers may be anxious that if they do not keep up with other entities in developing new practices, they will risk disapproval from some of their economically powerful stakeholders.

According to Scott (2004) institutions are social structures that have attained a high degree of resilience and also rules the predetermined pattern of conduct that are generally accepted by individuals in society. Environmental institutions include internal structures and rules such as the organisations environmental policy and management and formal external rules such as environmental legislation and regulations for example EMA. As a result institutional theory offers a possible lens for studying CER behaviour. Scott, (2004) highlighted that the theory involves an examination of how some of the organisations social structures including schema, rules, norms and routines become established as authoritative guideline for organisations behaviour. CER may develop as a myth incorporated in organisations structure on the idea that by so doing, the organisation will gain legitimacy, resources, stability and enhance its survival prospects (Meyer and Rowan, 2006).

2.4. Empirical Literature review

Empirical CER Studies Informed by Shareholders Theory

There are two components of CER research that follow the perspective of shareholder theory. The first one put emphasis of the relationship between a firm's financial performance and CER, whereas the second one focuses on shareholders/investors demand for CER. While shareholder theory predicts that social responsibility is negatively related to the entity's competitive position (Friedman, 2004) and that socially responsible behaviour may conflict with value maximization (Jensen, 2003), extant literature has conflicting results (Orlitzky, Schmidt and Rynes, 2003). Certain studies have found no such relationship, some have found a positive relationship (Clarkson, Li, Richardson, and Vasvari, 2008), others especially those approaching such studies

using social-political theoretical lenses (Clarkson et al.,2008) did come up with a negative relationship (Pattern ,2003),and yet others found a curvilinear relationship.

Such contradictions propose that the economic justification for corporate environmental reporting is unsubstantiated (Epstein & Freedman, 2004) or may be due, in part, to the different methods used to operationalize both environmental and financial measures (Stanwick and Stanwick, 2004). But these studies may have weaknesses in their causality assumptions because some of them treated corporate social performance as an independent variable while others treated it as a dependent variable (Scholtens and Zhou, 2008).

Related to the financial performance and CER relationship studies are studies on the relationship between corporate social performance (CSP) and corporate financial performance (CFP). While some of these studies have found uncertainty regarding both the sign and the direction of causality within the relationship (Orlitzky *et al.*, 2003), others have suggested that the quest for a general relationship is a futility (Margolis and Walsh, 2003) but others have found it in both management practice and literature (Brammer and Millington, 2008). These seemingly inconsistent outcomes may be explained by the vast diversity of methods of study used (Brammer and Millington, 2008). Problems have been identified related to underdevelopment of conceptual determinants of CSP, and the theoretical foundations of the CSP performance relationship (Margolis and Walsh, 2003). There is no consensus on the broad range of measures of financial performance employed and also failure by most studies to discern between risk adjusted and unadjusted financial performance (Margolis and Walsh, 2003).

The second group of researchers has followed the question on whether shareholders find corporate environmental management and reporting necessary. Shareholders find it more vital to stop pollution and improve product safety than pay dividends (Epstein and Freedman, 2004). Generally the pursuit of shareholder value maximisation reconcile with the legitimate and moral rights of other stakeholders such as employees, suppliers, customers and government. Shareholder theory argues that since shareholders' payoff is the residue pay, then taking care of shareholders involves taking care of all other stakeholders (Sundaram and Inkpen, 2004).

Empirical CER Studies informed by Stakeholder Theory

Ullman (2003) suggested a three-dimensional model that can explain the relationship between social reporting and social/economic performance, stakeholder power, strategic posture, and economic performance. Studying US firms, Ullman (2003) concluded that there does not appear to be a single reason why firms choose to disclose social information. Following the work of Ullman (2003), other environmental reporting researchers have approached their studies using a Stakeholder theory lens but have arrived at conflicting findings. While some find evidence that company management had tried to satisfy the environmental information needs of stakeholders (Elijido-Ten, 2004; McMurtrie, 2005), others find no significant evidence on stakeholder management or pressure on environmental reporting other than that of foreign parent companies (Moneva and Llena, 2004). While Ullman (2003) argued that stakeholder and economic power Ten (2004) and Brammer and Pavelin (2008) could not influence social reporting, Elijido-confirm such argument. Whereas most of the researchers reviewed have used the Instrumental stakeholder research perspective, at least McMurtrie (2005) has used a Managerial stakeholder approach.

Most of the Stakeholder theory oriented research studies support the shareholders point of view as well. These findings are to be expected because the Instrumental stakeholder thesis, commonly applied by these researches, has tendency to support Shareholder theory perspective (Saint, 2005), particularly because of trying to link social and environmental reporting to firm performance (Saint, 2005; Elijido-Ten 2004), and also because shareholders are part of the stakeholders (Freeman, 2004). There is a danger in using Instrumental stakeholder because it may suggest that balancing stakeholder interests through environmental reporting may have a negative or no effect on financial performance (Brammer and Pavelin, 2008), which is a contradiction because it means other stakeholders' interests are maximized at the expense of shareholders interest, a conflict implied in Jensen (2003).

Empirical CER Studies informed by Legitimacy Theory

Legitimacy theory is the most cited theory in the study of corporate social and environmental reporting (Campbell, 2003). Several studies have sought to 'test for' legitimacy theory as a motivation for corporate reporting but have had varied findings (Wilmshurst and Frost, 2006;

O'Donovan, 2007). Such studies have followed Lindblom (1984) cited in Janet Luft Mobus (2005) legitimacy argument and therefore have the objective of testing whether companies use environmental reporting to help close legitimacy 'gaps'. In so doing, the studies have sought to find the relationship between Corporate Environmental Reporting (CER) and identified determinants (Campbell, 2003, Degaan *et al.*, 2002). Some of these studies have concluded that CER is motivated by industrial sensitivity (Deegan, 2010; Deegan and Gordon, 2006), prosecution (Deegan and Rankin, 2006), media attention (Brown and Deegan, 2003), perceived public policy pressure resulting in time and event specific environmental reporting (Deegan *et al.*, 2002), and firm size (Deegan and Gordon, 2006).

Some studies have challenged the sufficiency of Legitimacy theory as a lens to explain corporate environmental reporting (Campbell, 2003). Others have questioned the ability to directly measure legitimacy, much as one can describe a firm as being legitimate, and conceive 'amounts' of legitimacy (Hybels, 2005). Hearit (2008) argues that, as an alternative, rather than trying to subjectively measure a firm's legitimacy directly, it can instead be inferred from the fact that being legitimate "enables organizations to attract resources necessary for survival".

2.5. The importance of Social and Environmental accounting disclosure for Mining Companies in Chiadzwa.

Additional to economic information, companies disclose environmental and social information in their annual reports and on their websites. In triplicate these type of information (social, environmental and economic information) are sometimes called Triple Bottom Line Reporting (Milne et al, 2003) or sustainability reporting (Gray, 2009).According Watts and Zimmerman social and environmental reporting (SER) influence allocation of capital and play a role in creation and maintenance of corporate image (K, BasuG, Palazzo, 2008), and as a result influence employees, customers and other groups in the society. Therefore Marange Resources (Pvt) Ltd should engage into social and environmental reporting in order to create and strength its corporate image of the company.

Alike the main objective of financial reporting as per the Financial Reporting Standard Board (2010, FAS-1) the main objective of environmental accounting and reporting is to provide information to present and potential stakeholders in making rational decisions. The information should be understandable to those who have a rational understanding of business and economic activities as well as of environmental impact caused through these activities and who are willing to study the information with reasonable diligence.

Environmental disclosure in annual reports has been reflected as important with other writers on the topic of social and environmental accounting and reporting. Corporate reports which disclose the financial performance and position of entities without significant environmental cost reporting will be showing a distorted view of the business (Pizzey ,2008).Environmental reporting serves various different purpose for different stakeholders which are;

- Permits businesses and their stakeholders to quantity corporations' faithfulness to the ethics set forth in their statement of environmental principle, and their many aims and objectives.
- It certifies stockholders to harness the supremacy of the capital markets to stimulate and warrant environmentally greater corporate practise.
- Empower individuals with the evidence they require to embrace companies responsible and calls shareholders further entirely into procedure of business objective setting

Thus according to Pizzey (2008) the importance of social and environmental disclosure for mining companies is to show a view of the operations of the companies which is not distorted. Consequentially mining companies like Marange Resources (Pvt) Ltd should engage in reporting of social and environmental issues in order to produce financial statements which are complete and provide a business view which is not distorted.

Social Contract Concept

The social contract concept of environmental and social accounting has been well accredited in many past works. Owolabi (2007, p. 58) agree that social contract concept is reasonable for

corporate social reporting .Other researchers, opines that social contract is central to social changes and reforms. Deegan (2009) associated the social contract expectation with the legitimacy theory where “there is a social contract between the organisation and those affected by the its operations”

A social contract implies reciprocal responsibility (Campbell et al. ,2003), with business undertaking socially desired actions in return for approval of its objective (e.g. profit maximisation).Hence entities that legitimize their actions therefore helps secure long-term existence, which is the principle justification for why companies will respond to wider community expectations (i.e. ethical behaviour).In the same breath Marange Resources can as well legitimize their actions in order to secure their long term existence.

Legitimacy Concept

One of the main ways that a company can respond to its stakeholders is through the disclosure of information (Wilmshurt and Frost, 2005; Gray et al., 2010) .From a legitimacy perspective entities are seen as using certain social disclosure (environmental and social disclosure) to rationalize their existence within society (Deegan and Rankin, 2006).

Disclosure is also used to address any real or supposed legitimacy gap “the greater the likelihood of adverse shift in social perception of how an entity is acting, the greater the desirability on the part of the organisation to attempt to manage these shifts in social perception (O Donovan, 2002 p. 345).

CSR reporting practise vary across countries (Adams ,2003) and between developed and developing countries (Imam ,2005) ,companies that report CSR information and account for ethical ,social and environment impacts gain benefits (Idowu and Towler ,2004 :Adams ,2002).Exemplary CSR reporting improves corporate image and relations with stakeholders (Khan etal ,2009 ,p .346),it increase customer loyalty ,attracts and retains more talented people in the business, reduces the potential reputational risks which may arise from environmental incidents , improves quality of products and services ,etc. (Idowu and Towler ,2004, p 423).As it is proven the importance of social and environmental disclosure for example increase in

customer loyalty it is recommended for Marange Resources (Pvt) Ltd to venture into such disclosure. Furthermore by having a separate environmental and social report just as financial reports signify that Marange Resources also consider environmental disclosure as much crucial as financial reporting.

2.6. Suggestions of strategies for improving and influencing the reporting of social and Environmental accounting by mining companies.

Apprehensions about the safeguard of the environment have increased considerably amongst regulators, environmentalist and the society in general .Contextually, even if companies, particularly those belonging to industrial sector have been generally considered one of the major source of environmental impacts, it cannot be ignored the fact that public organisations also generate a significant amount of pollution (through the use of vehicles, the consumption of paper, electricity and water etc.). In this respect they were considered by Taylor et al., (2004) “silent destroyers”.

There is an extensive accounting literature relating to the factors that have an influence on the level and (or) characteristics of environmental disclosure in private sectors (Ahmad et al., 2003; Holland and Foo, 2003; Ahmad and Sulaiman, 2004; Freedman and Jaggi, 2005; Monteiro and Abar-Guzman, 2010). Consequentially traditionally studies have been focused on external visible features of companies (Monteiro and Abar-Guzma, 2010) by including variable such as size, industry membership foreign ownership, stock exchange listing, and profitability and so on.

Among others variables were found to influence the level of environmental disclosure by public entities, namely size, organisations activity sensitivity towards the environment, entity’s location (rural or urban) (Mc Elroy et al., 2005), degree of development of environmental management practises (Frost and Seamer, 2002) and financial funds source (specifically, extent to which an entity depends on the state or country general budget to obtain financial funds) (Frost and Seamer, 2002).

Generally the fulfilment of environmental legislation (Mc Elroy et al., 2005) and the imitation of other organisation units (Marcuccio and Steccolini, 2005) appear to be the main motivation for adopting environmental accounting practices by public organisations. Frost and Toh, 2008

argued that the sensitivity of the activities of an organisation is an enough variable to influence the level of environmental disclosure of entities it therefore follows that as Marange Resource (Pvt) Ltd mining activities are highly sensitive to the environment it should with on doubt disclose it social and environmental activities.

Though the research has been focusing on voluntary disclosure of SEA information, many academics favour mandatory standards or legislated reporting requirements ,and various arguments are presented mostly focused on the protection of stakeholders' interests (Owen et al.,2001).On the other hand Unerman and O'Dwyer 2007 , p.334 provide a case that improved regulation can also 'enhance corporate economic performance and shareholder value' by 'reducing actual and perceived risks inherent in many business activities'.

Frost (2007, p .201)made available evidence that mandatory reporting requirement do escalate the level of reporting, showing that the introduction of s.299 (1) (f) into the Australian Corporations Law which needs companies to report on their environmental performance with respect to any 'particular and significant environmental regulation'.He foundthat its introduction resulted in a substantial increase in the recognition of environmental regulation within the statutory sections, with a subsequent decline of voluntary disclosure.

2.7. Evaluation of adequacy of reclamation and closure plans offered by mining proponents In Chiadzwa.

Progressions in the 21st century also saw an increase in the responsiveness of the need to provide for "sustainability " of ecological and social setting which mines are developed, operated and closed. The six tenet for sustainability of mining provide the foundation for sustainability planning at a mine site .The stimulated to the need to do more than 'design for closure 'requiring that we also prepare "Post Mining Sustainable Use Plans" for the mine site and affected area (Robertson et al,2008 and Robertson and Shaw,2008)

Study show that the utmost severe and far-reaching environmental consequences of mining activities occur after mining ceases, during the closure period. Waste rock plies, open pit, tailing impoundments, and leach plies left behind and unattended by the mining company can begin

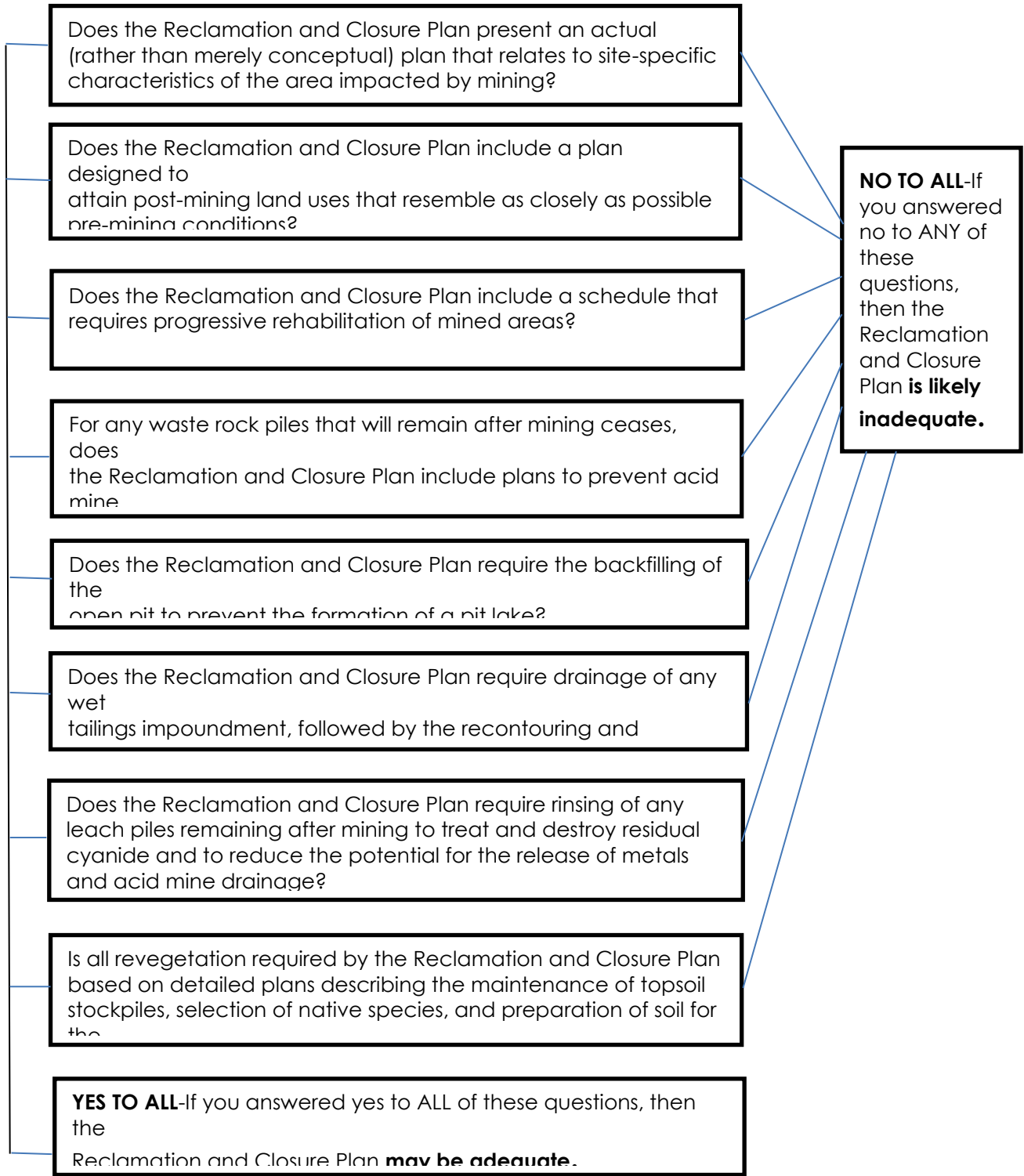
generating and realising high toxic wastewater that can result in colossal damage to water resources and aquatic life.

Even if reclamation is perceived as something to be carried out after the mining activities ceased, reclamation techniques covers a wider range of activities that should commence in the earliest planning phase of a mining project. Mining companies should take into account reclamation plans in their initial production development reports as well as in their environmental impact assessment (EIAs). Reclamation activities should be planned and incorporated concurrently with the mining of the site, in a bid to reduce waste early on and prevent expensive clean-up after the site has been closed. Thus mining project should be granted an authority to proceed if and only if the company has put forward a detailed, workable and adequately funded plan to avoid environmental impacts for decades after mining ceases and restore ecology of the mine site as closely as possible to pre-mining conditions.

Theoretical and Actual Plans

The normalities is corporations give in to EIAs comprising merely a 'conceptual' plan not an actual plan. The theoretical plan may outline right approximately what the mining company might do to thwart environmental effects during the closure period, but is deficiency in key particulars essential to assess whether the plan would work. Other EIAs shows a theoretical plan that is only a few pages long but missing crucial detail

Figure 2.2 FLOWCHART- Evaluating the adequacy of the Reclamation and Closure Plan



Adapted from Guidebook for Evaluating Mining Project EIAs.

An evaluation to the extent to which Marange Resources (Pvt) Ltd meets all the yes needed for the reclamation and closer plan to be adequate can (requirements as shown in the figure 2.2 above) assist them in knowing whether their plan for reclamation and closure is adequate.

2.8. Drivers and Motivations for Social and environmental Disclosure (SED) which can beused EMA to persuade social and environmental disclosure by mining companies operating Chiadzwa.

According to the opinion of Spence and Gray, (2007) disclosure of environmental and social aspects is perceived as voluntary. It can therefore be argued that business management of a particular organisation who embark on a tedious accountability reporting on information concerning to the organisations environmental and social performance solely does so for exceptional concern and for a determination. Aforementioned researches which have examined on the reason why firms produce SEA have given certain comprehensive explanations why administration of commercial entities might do so (examples :Campbell,2009 ;Spence and Gray ,2007 ;ACCA ,2004; Miles ,Hammond & Friedman ,2002; UNEP ,2000).Amongst others we look at stimulators and incentives by supervision form three dissimilar explicit areas:

I. Moral /Principled and business performance drives

Several customers especially in products market come up with decisions to support products and services of producers grounded on moral presentation of the firm and the effects of its business actions on environment (Campbell, 2009) Exemplary other customers may drop to purchase from firms with hostile moral reputation. According to Campbell, 2009, prospective workers may as well use moral routine as a standard in their selection of possible employer. It is also probable that particular firms may incur environmental commitments as a straight consequence of their main business (e.g. chemical industries, extractive industries, and waste management companies). As for such organisations, compliances with environmental regulations and laws becomes more central to their business activities (ACCA, 2009). Hence Marange Resources can use this concept to increase its sale.

II. Financiers' Confidence

Publication of trustworthy social and environmental reports which are appropriately audited and qualified by auditors inspires investors to upgrade trust in a company. Marange Resources should make use of this strategy to attract investors. In favour of this argument Campbell (2009) contends that, cumulative figures of investors are consuming environmental and social performance as a measure for their investment choices. He supplementary postulates that “while this has been an aspect in moral funds since they first appeared in the early 1980s, ethical apprehension has developed additional ‘mainstream’ in recent years”. Henceforth, prospective investors improve their speculation decision making in an organisation based on issues of corporate, environment and social report.

III. Reputational Enhancement Purpose

Miles, Hammond and Friedman (2002) dispute that once a firm has commenced reporting on environmental and social matters in its year end reports and accounts, a total of observed benefits get up. These paybacks comprise improved company appearance; external acknowledgement via awards or classification exercises; upturn in workforce self-esteem; and corporate drivers such as cost or risk decrease. It is consequently apparent that there is a combination of both pre-emptive and responsive motives for firms to report environmental and social matters in their year-end financial reports.

As postulate by Frost (2001, p .201) a movement from voluntary SED to a mandatory regulated requirement will go a long way in enhancing SED .It if therefore up to EMA to adopt this suggestion or not in order to persuade SED by mining companies operating in Chiadzwa.

2.9. Corporate Social Reporting: Case of Other Countries

Generally the global appraisals of CSR have inclined to concentrate on the so-called developed countries. A number of studies have attempted to examine this issue in different European countries. For example, ;Bebbington (1999) made an evaluation of the environmental reporting compulsory in Denmark; Llena et al (2007) analyse the environmental disclosures and compulsory accounting standards in Spain; Larrinaga et al. (2002) also analyse accounting regulation in the Spanish context; Bebbington et al. (2003) try to build systems for effective regulation, based on the case of the electricity sector in Spain and in the United Kingdom; Criado et al. (2008) analyse the compliance with mandatory environmental reporting in financial statements in Spain. Studies that focused on Spain concluded that there is a low degree of compliance with the standards published.

The case study of Portugal states that Environmental and Social Accounting literature shows that there is scarce research on environmental responsibility disclosure by Portuguese companies; as the majority of the studies employ legitimacy theory to voluntary disclose information, it contributes to the development of legitimacy theory by talking about mandatory environmental information; using the case study as the research methodology it answers the calls to use this methodology as a research device (Parker, 2005); it contributes to the debate of regimes for effective environmental reporting regulation (adding Bebbington et al.,2003); it provides a description of the Portuguese environmental accounting regulation; it highlights the behaviour of a Portuguese company in a sensitive environmental industry thought in annual reports.

CHAPTER 3: RESEARCH METHODOLOGY

3.0. Introduction

Research methodology put emphases on the manner in which the research is planned, structured and executed in a bid to comply with scientific criteria. Particularly this chapter forms an integral part of this research under study ,thus it assist in explaining the nature of the data and highlights the methods to be employed that will lead to the generation of appropriate conclusions through applicable data processing. Methodology maps out the methods to be utilized during the research as a result it covers type of research, population, sampling, data collection, data analysis, reliability and validity of the study. The essence of this chapter is to empirically examine the methods used to collect data and information about Environmental and Social Accounting.

3.1. Research Design

Bryman and Bell (2003) state that a research design is a structure that guides the execution of the research method and the analysis of the subsequent data. Kothari (2007:31) defines research design as “a conceptual structure for the collection, measurement and analysis of data which combines relevance and economy”. For the purpose of this study both qualitative and quantitative methods of data collection will be utilised for collection of data in Chiadzwa. Creswell (2014:12) highlighted that research design are types of enquiry within qualitative, quantitative and mixed research methods approaches that provide specific directions for procedures in a research design.

3.1.1. Exploratory Research

Robson, 2002 p 59 stated that “an exploratory study is a valuable means of finding out ‘what is happening; to seek new insights; to ask questions and to assess phenomena in a new light” According to Dr Sue Greener (2008), this research is designed to allow the researcher to gain an

insight of some issues with the aim of developing suggestive ideas. Exploratory research design happens to be the most basic design meant to make available insight and thoughts about a problem. It explores trends in the industry with the idea of identifying specific ideas and insights to generate explanations as to certain behaviour in the industry. The fundamental concept behind exploratory research is to explore and interpret relationships between different concepts and build theory in relation to the topic. Three principal ways of conducting exploratory research are there, which are a search of the literature; interviewing ‘experts’ in the subject; conducting focus group interviews. The greatest merit of this research design is that it is flexible and adaptable to change.

3.1.2. Descriptive Research

The object of descriptive research is ‘to portray an accurate profile of person, events or situation’ (Robson 2002:59). This research design is an extension of, or a forerunner to, a piece of exploratory research or, more often a piece of exploratory research. The objective of descriptive research is to provide a description of various phenomena connected to individuals, situations or events that occur. Primarily it is concerned with the gathering of numeric measureable data (Safaei Farzad, 2006).

3.2. Population and Sampling

3.2.1 Sample Frame

A sample frame is a listing of all units in the population from which the sample will be selected (Bryman, 2012:187). Burney and White (2010:258) note the researcher must develop a definition of the population for the purpose of the survey and this may be different from the actual population. Scheaffer et al (2012: 9), emphasised that a frame is a list of sampling units, McBurney and White further note that the population the researcher works with for a particular study is called a sampling frame, and each individual that falls within the sampling frame is called an element. The sample frame used in this research was mining companies in Chiadzwa area, inhabitants of the Chiadzwa area and EMA staff.

3.2.2. Sampling

A sample is a segment of the population that is selected for investigation purposes, it is a subset of the population, and the method of selection may be based on probability or a non-probability approach (Bryman 2012:187). According to McBurney and White (2010:392), a sample is defined as a subcategory of population. Dr Sue Greener (2008:51) therefore defined sampling as a practical way of studying people and their activities, thoughts, attitudes, abilities, relationships in relation to business. In accordance to S.K Yogesh (2006:81) sampling is an indispensable technique of behavioural research; the research work cannot be done without use of sampling. Due to the fact that studying the whole population is impracticable as a result of various reasons, sampling thereby became a necessity. A sample representing target population of Marange Resources (Pvt) Ltd would be taken. Consequentially a sample refers to the representation of target population.

Sampling present various of advantages ,to mention a few some of the merits are as follows, it ensure homogeneity and improvement of data quality and accuracy, data analysis become cheaper and easier, data collection program is made easier ,follow up on respondents becomes easier and cheap. However sampling also have its own drawbacks which are but not limited to the following the sample chosen may not reflect the whole population and might left out some characteristic that are material and materially affect the findings.

3.2.3. Target Population

According to Wrigth and London (2009:56) population is defined as the entire set of people, object, items (or anything) for which the researcher wants his study to be applicable. Scheaffer et al (2012:8) asserts that the term refers to a collection of elements about which we wish to make inferences. In the same breathe Bryman (2012:187) posits that population has a much broader meaning as compared to the everyday use of the term, whereby it tends to be associated with the nations entire population. Having the term population defined, Castillo (2009) defined target population as generally a collection of individual or objects that are the main focus of a scientific query.

In this research of environmental and social accounting and reporting our target population will be the residents of Chiadzwa area, EMA Officials, as well as the finance department (financial accounting and management and the cost accounting) and the SHE department of Marange Resources (Pvt) Ltd. It is crucial for the study as the people of Chiadzwa, the companies and EMA are well knowledgeable pertaining the operations at Chiadzwa.

The targeted population is shown diagrammatically in table 3.1 below:

Table 3.1 Targeted Populations

Target Population	Population	Sample Size
Finance Department	15	14
SHE Department	22	12
EMA Officials	5	1
Chiadzwa Residents	5	3

3.3. Research Instruments

These are tools used in data collection to find solutions to the problems under investigation. Instrumentations therefore can be defined as the methods of data collection used in research .This study used interviews, questionnaires and observations as the research instruments.

3.3.1. Questionnaires

According to David and Sutton (2004:368) a questionnaire is a question based data collection instrument designed to be distributed and filled in by the person responding without the presence of the interviewer, there are structured but can have a degree of variation in the level to which expected answers are standardized. Questionnaires consist of a series of questions and other prompts for the purpose of gathering information from the respondent. These questionnaires can either be open ended or closed ended questionnaires. Open ended questionnaires allow the respondents to avow their opinions and objectively give their judgement without restriction.

Open ended questionnaire are so helpful since they provide a deeper insight into the research project due to the free-lance answering requested form the respondent.

Closed ended questions are to be used also, these type of questionnaires have all possible answers thus guiding the respondent on the scope and boundaries of the research in case some individuals would miss-behave if all the questions give them the freedom to express their opinion without restrictions (open ended). For the purpose of this study questionnaires are to be issued to selected representatives of the finance department and SHE department of Marange Resources (Pvt) Ltd.

Justification of using questionnaires

Questionnaires provide and translate the survey objectives into easily understandable language to respondents and pull the requisite information from them, which will satisfy the researcher's information. Also according Bryman (2012), absence of interviewer effect characteristics of interviewer and respondent such as ethnicity ,gender and the social background may combine into bias ,since there is no interviewer the effects are eliminated.

3.3.2 Interviews

This are face to face talk data collection methods ,they can be one on one or group based and may be more or less formal (David Sutton ,2006:365).They can as well contain structured and unstructured interviews. The sole purpose of this technique of data collection is to get a full understanding of the respondent's actions and discover more fundamental reasons underlying the respondent's attitude.

The interview will be conducted to people in Chiadzwa community, the Safety, Health and Environment (SHE) department and Finance department of Marange Resources and the Environmental Management Agencies.

Justification of using Interviews

The interviews will grant real interaction, one on one series of communication between the study and the respondents; also it will give first hand unbiased information to the researcher. Also interviews will help the study to obtain information from people in Chiadzwa by explaining all the technical jargons that they could not understand hence receiving accurate first-hand information.

The use of interviews will allow the study to probe for clarity on certain issues and could also note non-verbal actions by the respondents which could assist in evaluating responses especially illiterate individual in Chiadzwa community. Data collection via interviews enable the study to ask additional questions not originally included in the interview questions or questionnaires. However arranging of interview is time consuming.

3.3.3. Observations

This is a method of data validation by monitoring the actual operations on the ground. In a bid for data validations this kind of data collection is going to be used in Chiadzwa area. The study will observe the operations and ways in which the mining companies at Chiadzwa are responsible and accountable for the environment. The study will observe social cost under resettled people at Arda Transau and how they were accounted for and transparency in accounting for the resettlement of people in the community.

The observations will also help to see how Marange Resources (Pvt) Ltd and other mining companies in Chiadzwa deal with the disposal/dumping effluents and tailings from the plant and how they are accounting for such environmental cost. Observations allow qualitative researchers to identify recurring patterns of behaviour that participants may be unable to recognise. They help to determine questions and follow-ups on the research and they reveal interrelations among multifaceted dimensions of group interactions. However training of observer is rather time consuming and costly, also judgement of some observers might be biased.

3.4. Data Sources

In an attempt to answer both research questions and research objectives the researcher used both primary and secondary data sources.

3.4.1 Primary Data Source

Primary data can be seen as straight from the horse's mouth data, thus in other words no other person has subsequently analysed or summarized it (Thomas, 2009:31). For the purpose of this research questionnaires and interview will be used to collect primary data for Chiadzwa peoples as well as the mining companies. Methods which best suit primary data collection from Chiadzwa area will be designed. The merit for using primary data is that it is original and reliable since it is first hand data. In same breath primary data cannot go without its own drawbacks thus primary data is time consuming to gather and it requires proper planning in order to use time efficiently hence the researcher is going to design a time schedule for that collection so that every minute will be used fruitfully.

3.4.2. Secondary Data Source

These constitute data which had been collected for other purposes, perhaps in most cases it might have already processed and subsequently stored. Secondary data will be obtained from the published and unpublished source on the topic social and environmental accounting and reporting, also used where maps, government reports as well as information published EMA. Ghauri and Gronhaug (2005), argues in favour of using secondary that for many research questions and objectives the main advantage of using secondary data is the enormous saving in resources in particular time and money.

3.5. Data Collection Procedures

As defined by David and Sutton (2004) data collection is seen period in the research project that involves engaging with a target sample or population from whom data is collected

.Questionnaires will be hand delivered to the respondent who will fill those questionnaires at their own time and then collected later from them by the researcher .Also interviews are going to be used as a tool for data collection which implies that appointments and booking will be pressed with management of Marange Resources (Pvt) Ltd and EMA officials.

3.6. Pilot Testing

Pilot testing basically means finding out if your survey; key informant interview guide or observation form will be workable within the real world by trying it out first on a few people. The fundamental purpose for this testing is to make sure that everyone in your sample not only understands the questions, but understands them in the same way, and you can in the same breath see if any questions make respondents feel uncomfortable. Thus a pilot test is conducted to detect weakness in design and instrumentation and to provide proxy data for selection of a probability sample. Getting to know how long it takes to complete or finish the survey in real time is something inevitably provided by pilot testing?

For validation of questionnaire, the researcher carried out a pilot feasibility study. Before the issue of the actual questionnaire a preliminary analysis was conducted, the questionnaires were dispatched to the various subgroups within my intended sample in Chiadzwa. In a tender to ensure that the survey represent the opinion of the public the pilot testing covered all groups of people ,all ages and educated and un educated in Chiadzwa community and the other members of staff of Marange Resource. The pilot study was carried out to establish reliability, clarity, and validity of the research instruments to be deployed for the gathering of final data.

Table 3.2 Pilot Testing Results

Sample	Number of Questions	Number of Questions Approved
Marange Resources Staff	10	9
Marange Resources Staff	10	10
Student	10	8
Member of Community	10	9

For the unapproved questions trials were made to restructure the questions so as to make them simple and understandable to everyone within the targeted population.

3.7. Validity and Reliability of Research Instruments

3.7.1. Validity

Validity is one of strengths of qualitative research and it is based on determining whether the findings are accurate from the stand point of view of the researcher (Creswell 2014:201). Bryman (2012:47) asserts that validity is concerned with the integrity of the conclusions that are generated from a piece of research. Validity can also be defined as the extent to which the instrument measures what it purports to measure. Validity ensures that the sample that has been adopted/chosen by the researcher adequately represent the target population study.

3.7.2. Reliability

As in accordance to Saunders (2009:156), the extent to which your data collection techniques or analysis procedure will yield consistent findings is referred to as reliability. Alternatively reliability can be defined as to the extent to which a questionnaire, test, observation, interview or any measurement procedure produce the same results on repeated trials (www.michaeljmillerrphd.com 08/04/2014:5:34am). Reliability also comprehend the minimisation

of errors in data collected. In order for the researcher to successfully complete the research the information gathered should be consistent

3.8. Data Presentation and Analysis

Data analysis usually involves reducing accumulated data into a manageable size, developing summaries, looking for pattern and applying statistical techniques (the mean, mode median and standard deviation). Data collected during the field research, from questionnaires and interviews were analysed using the mode to obtain the views of the general public (Chiadzwa residents). Descriptive methods were also used analyse the data.

The researcher used various ways of presenting the data which gives a clear presentation and understanding of the research findings. These include pie charts, bar graphs, tables and other means of graphical presentation. An analysis in words after every graphical presentation will be made to make it more understandable. Bryman (2012:291) highlights that content analysis is an approach to the analysis of documents and texts that seek to quantify content in terms of predetermined categories and in systematic and replicable manner.

3.9. Chapter Summary

The chapter outlined the data collection methods used for both primary and secondary sources. The employed strategies of data collection should enabled the study to gather a lot of information on environmental and social accounting and reporting in mining industry. The findings of this study will now be highlighted in the next chapter. In chapter 4, data collected will be analysed. Graphs and tables will be used to give a pictorial view of the findings

CHAPTER 4

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.0. Introduction

This chapter focuses on analysis, interpretation and presentation or communication of information gathered during the research. Much focus of this chapter is on key research findings with a view of drawing conclusions that provide a platform for preparation and use of Environmental and Social Accounting information. The collection of data from primary and secondary source was done to give answers to the study questions.

4.1. Response Rate

4.1.1 Questionnaires

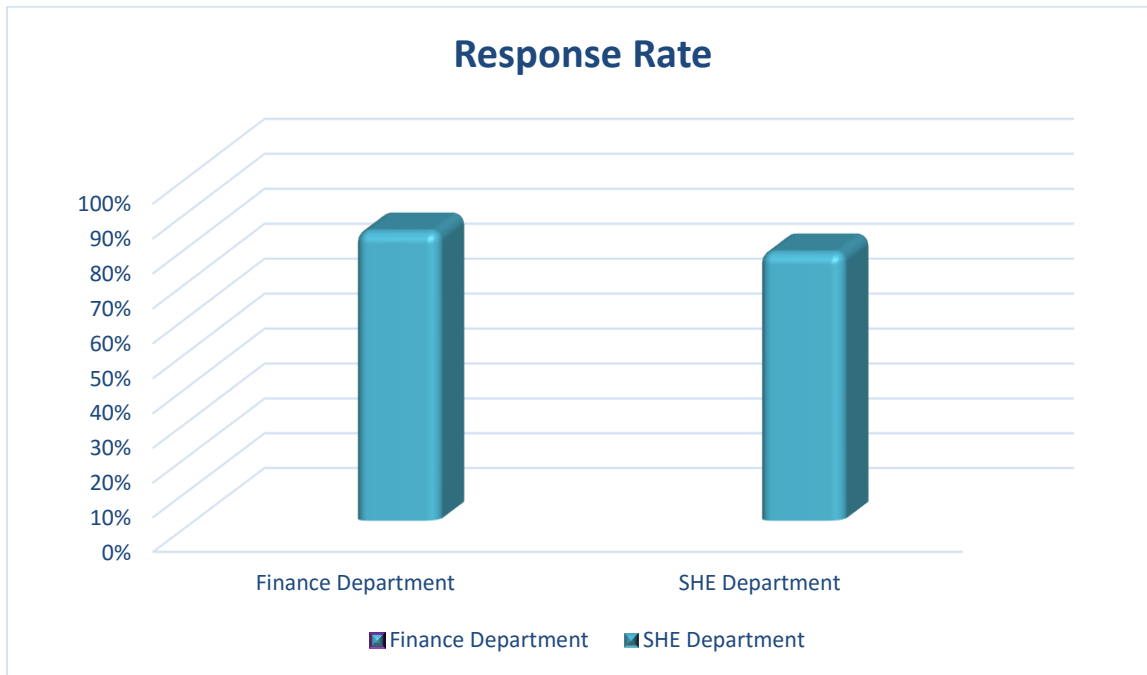
Questionnaires were dispatched to two groups of the targeted population and the responses are tabulated below. The study used the information obtained from the questionnaires to obtain findings for the study.

Table 4.1 Questionnaire responses

Target Population	Dispatched	Responded	Non-responses
Finance Department	12	10	2
SHE Department	13	10	3
Totals	25	20	5

The below figures show the response rate of the target group.

Figure 4.1 Percentage for questionnaire responses



Source Primary Data

The above figure (4.1) shows that of the administered questionnaires to the Finance Department of Marange Resources (Pvt) Ltd 83% were completely responded, the same applies to the SHE department which had a response rate of 77%.

The non-responses were due to the fact that with the then forensic audit undergone by all diamond mining companies by the anti-corruption team some of the employees were reluctant to disseminate company information in a bid to protect their employment.

Basing on the above response rate from questionnaires, the gathered data was safely used in presentation, analysis and making conclusions of the study since the information obtained is representative enough to validate the findings of the study.

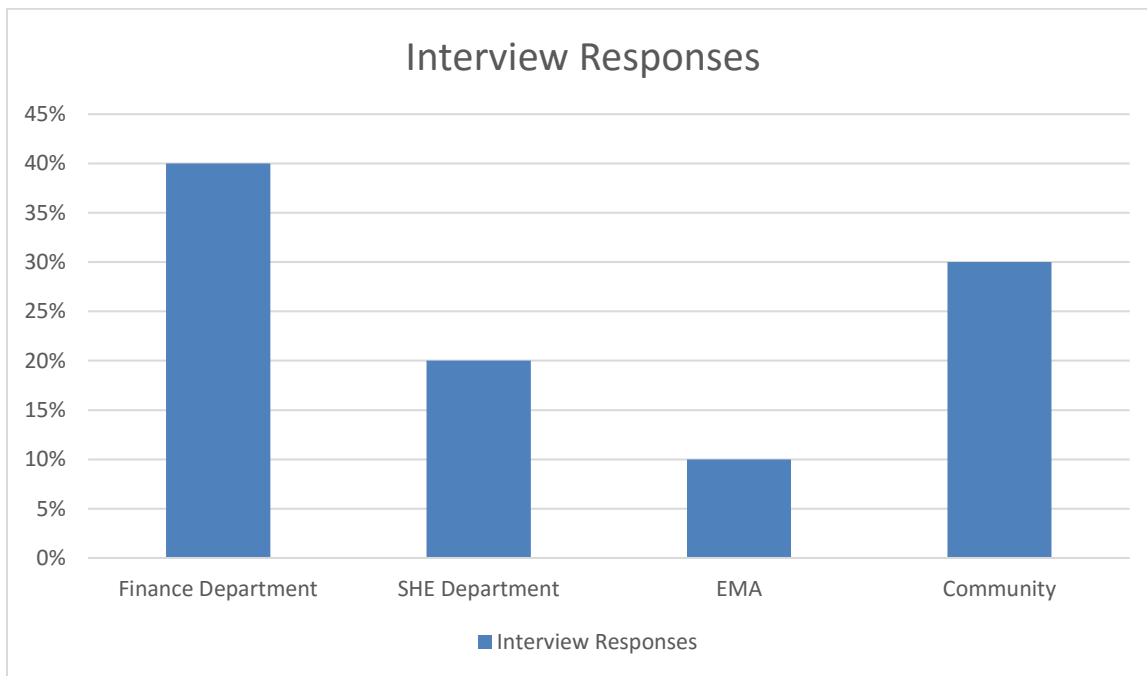
4.1.2. Interviews

Interviews were conducted from the targeted population of the administration members of Marange Resources (Pvt) Ltd and EMA and as well as the targeted population of the community of Chiadzwa as depicted below.

Table 4.1.2 Interviews Responses

Target Population	Successful Interviews	Unsuccessful Interviews
Finance Department	4	0
SHE Department	2	0
EMA Official	1	0
Community	3	1

Figure 4.1.2 Interview response rates



Source Primary Data

More interviews were conducted to the finance department since thus where most of the study information was supposed to be sourced from, of the ten interviews carried out four of them were from the finance department thus 40% of the interview population. While 2/10 (20%) was carried out in the SHE department, 1/10 (10%) carried out from EMA official to obtain their

view point on environmental issues since it is the governing board in Zimbabwe of Environmental Management. Thirty percent 3/10 (30%) of the interviews were conducted from the community, interviews were preferred for the community not questionnaires since most of the residents of Chiadzwa are illiterate Thus interviews facilitated for oral data collection from the community .Interviews were solely focused on the application of Environmental and Social Accounting and how it affects the residents of Chiadzwa community.

The unsuccessful interviews which totals to 10% where due to the fact that the interviewee did not show up for the interview simply because he did not want to associate himself self with dissemination of information he consider to be confidential.

The successful interviews of 10 out of the expected 11, expressed as a percentage amounts to 91%. Based on these response rates, the gathered data can be out of harm's way used in presentation, analysis and conclusion of the research study since the information obtained is representative enough to validate the findings and arrive at a conclusion.

4.2. Evaluation of ownership and adequacy of Reclamation and closure plan offered by mining proponents in Chiadzwa (Marange Resources)

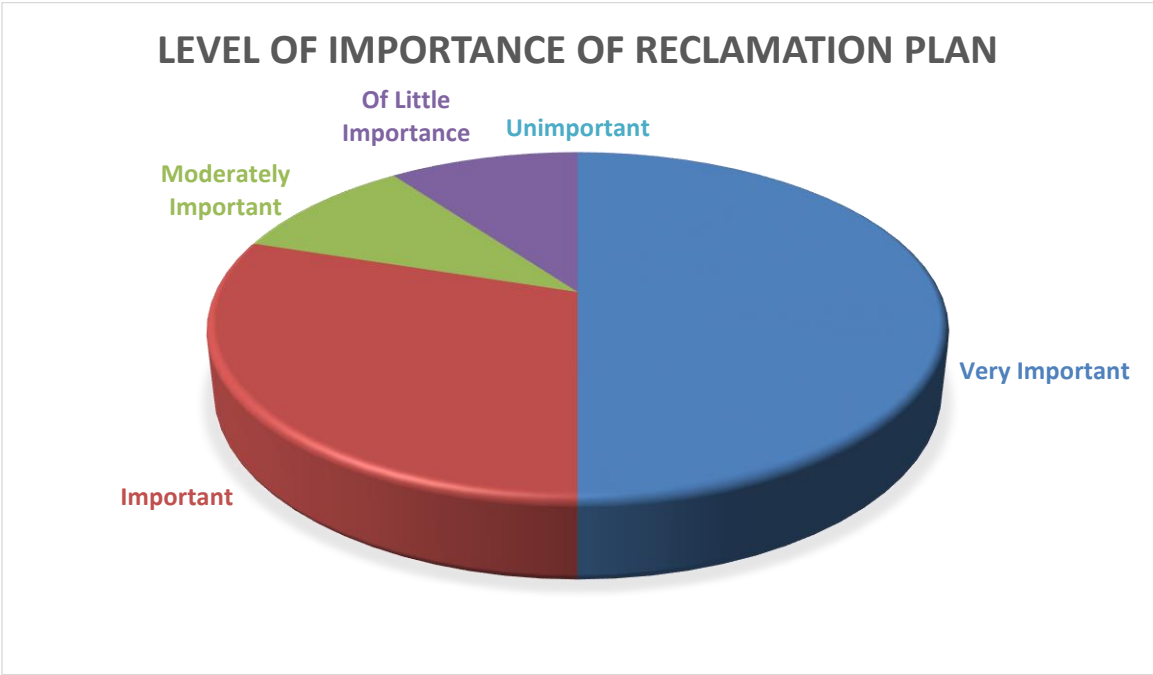
Information obtained through a way of questionnaires and interviews helped the researcher to evaluate the ownership and adequacy of the reclamation and closure plan offered Marange Resources (Pvt) Ltd

Importance Reclamation and Closure Plan

The question was asked to obtain information on the importance of having an adequate reclamation and closure plan. The study indicated that 5/10 (50%) of the respondent strongly agrees that it is very important for Marange Resources to have an adequate reclamation plan. 3/10 (30%) agrees to the same notion and highlighted that it is important to have this plan.1/10 (10%) had a moderate view on the importance of having an adequate plan.

While 1/10 (10%) of the respondents highlighted that it is of little importance for Marange Resources to have an adequate plan. Hence a modal rate of 8/10 (80%) signifies that it is important for a company to have a reclamation and closure plan since they argued that this will help a long way in resuscitation of the mining area to its pre-mining condition after the mining activities has ceased. A mode of 8 conquer with Robertson et al (2008) and Robertson and Shaw (2008) that there is need to do more that design for closure but what is required is to prepare post mining sustainable use plan for the mining site and affected area.

Figure 4.2 Importances of Reclamation and Closure Plan



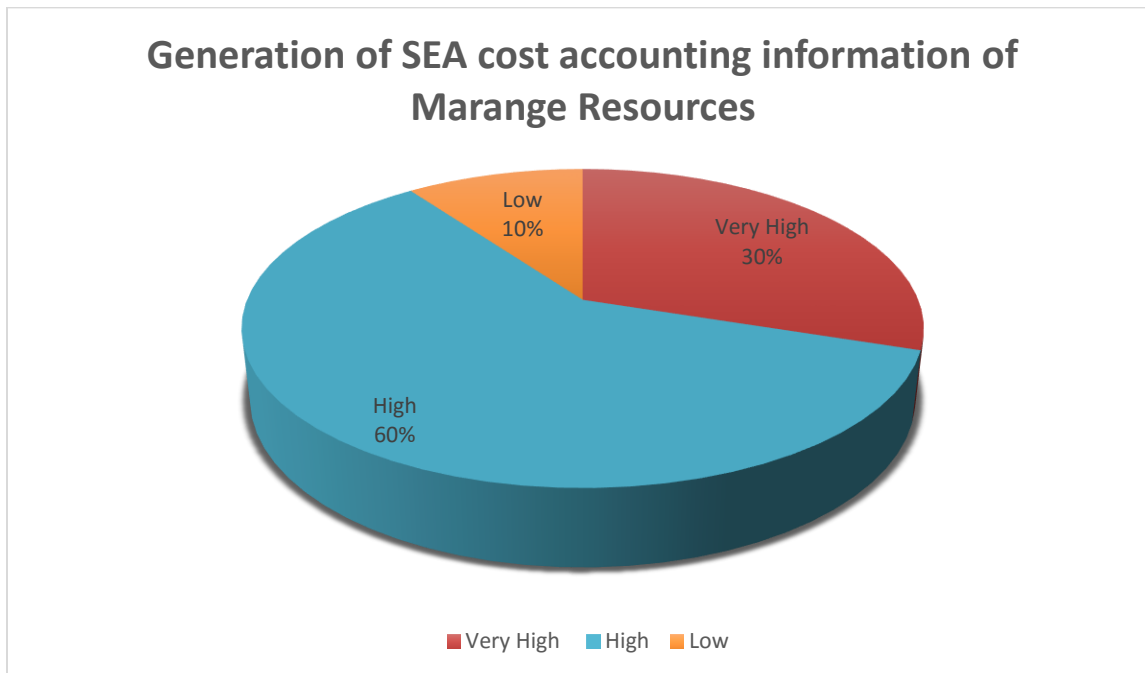
Source: Primary Data

Having adequate plan goes a long way in assisting the company to set for provisions for reclamation and closure cost hence preparation of proper financial statement for companies in accordance to IAS 37

However since it is not mandatory to have the plan most of the mining companies do have a mere conceptual plan rather than having an actual plan that relates to sites-specific characteristics of the area impacted by mining.

4.3 Suggestion on strategies for improving and influencing the reporting of Social and Environmental accounting of mining companies in Chiadzwa.

Figure 4.3 SEA cost information



Source: Primary Data

The intention of the question was to have an appreciation of how the Marange Resource generate the Environmental and Social cost so as to aid in making suggestions and strategies for improving and influencing the reporting of Environmental and Social Accounting of Marange Resources (Pvt) Ltd.

Verdict of the study divulges that the Marange Resources to a greater extent generate Environment and Social information. A model rate of 6/10 or 0.6 was found being advocates of

the notion that Marange Resources to a higher extent generate SEA information. The above information is representative that Marange Resources to a greater extent generate Environmental and Social information since 90% (60%- high and 30% - very high) responded that they generate this information to a greater extent depicting that Marange Resources generate information on SEA.

Solomon (2005:1) explains that Giddens (1990) and Lupton's (1999) works explains that the 'society was becoming characterised increasingly by a decline in trust in institutions and organisation in general'. Solomon (2005) explains further that 'it was this decline in trust which was exaggerating the level of risk in society'; and that reducing perceived growth in society risk was rebuilding trust as a means of risk reduction'. Rebuilding trust was achieved by firms through social and environmental accounting and disclosure .The desire to regain the trust in the society companies were left with no choice but only to be socially and environmentally accountable hence the saw an improvement and influence of the reporting of social and environmental accounting.

The only inconsistent that the study noticed was the way in which these environmental and social cost were being reported in the books of Marange Resources. As there is no stipulated accounting framework which clearly give guidelines on how to report and generate Environmental and Social costing information. Various cost centres are there available which are used by Marange Resources on reporting. The study identifies these various cost centres to which environment and social cost are allocated to which are;

- I. Donations
- II. Social Costs
- III. Corporate Social responsibility
- IV. Sponsorships
- V. Relocation

The study also noticed that although Marange Resources report to a greater extend about social and environmental information, it does not have a framework in which they follow which lead or results in uneven presentation and reporting of environmental and social information. The lack of this framework gives rise to miss posting to wrong cost centres which will result in presentation

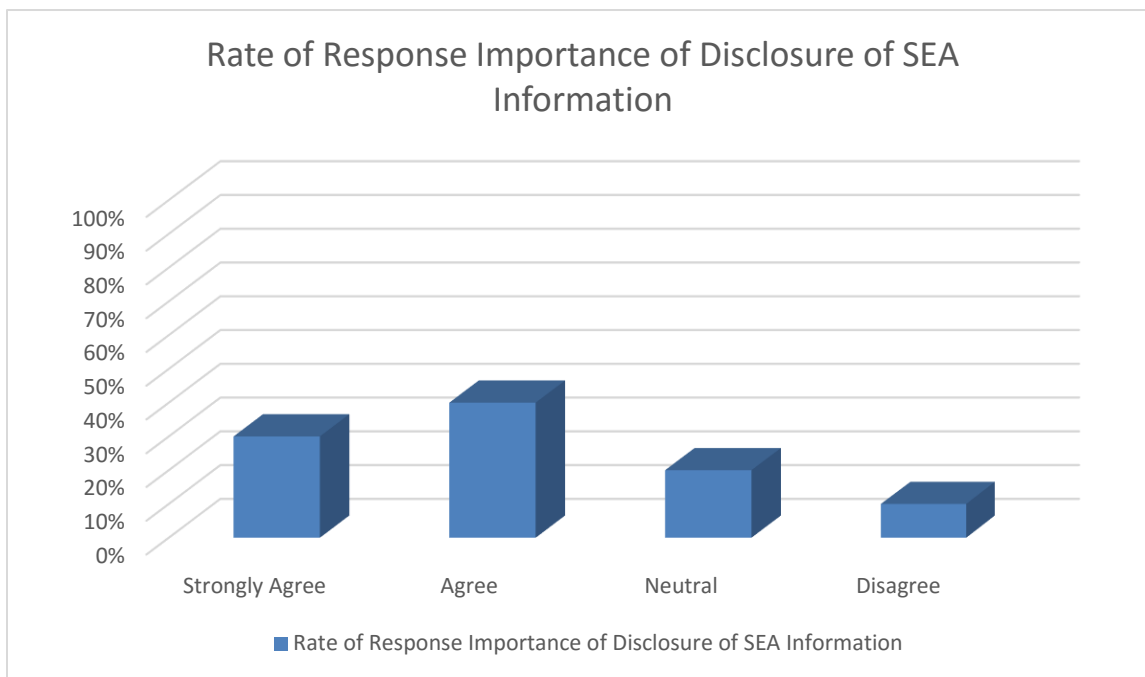
and reporting of wrong information. The most common shortcoming of this miss posting is that it does affect cost centres since through the system of absorption costing system other cost centre will be made to absorb cost which they are not supposed to and this affects managements planning and decision making.

4.4. Importance of Social and Environmental accounting disclosure for mining

Companies in Chiadzwa (Marange Resources)

Figure 4.4: Importance of SEA Disclosure Response

The question was asked to obtain information on whether it is important to disclose SEA information.

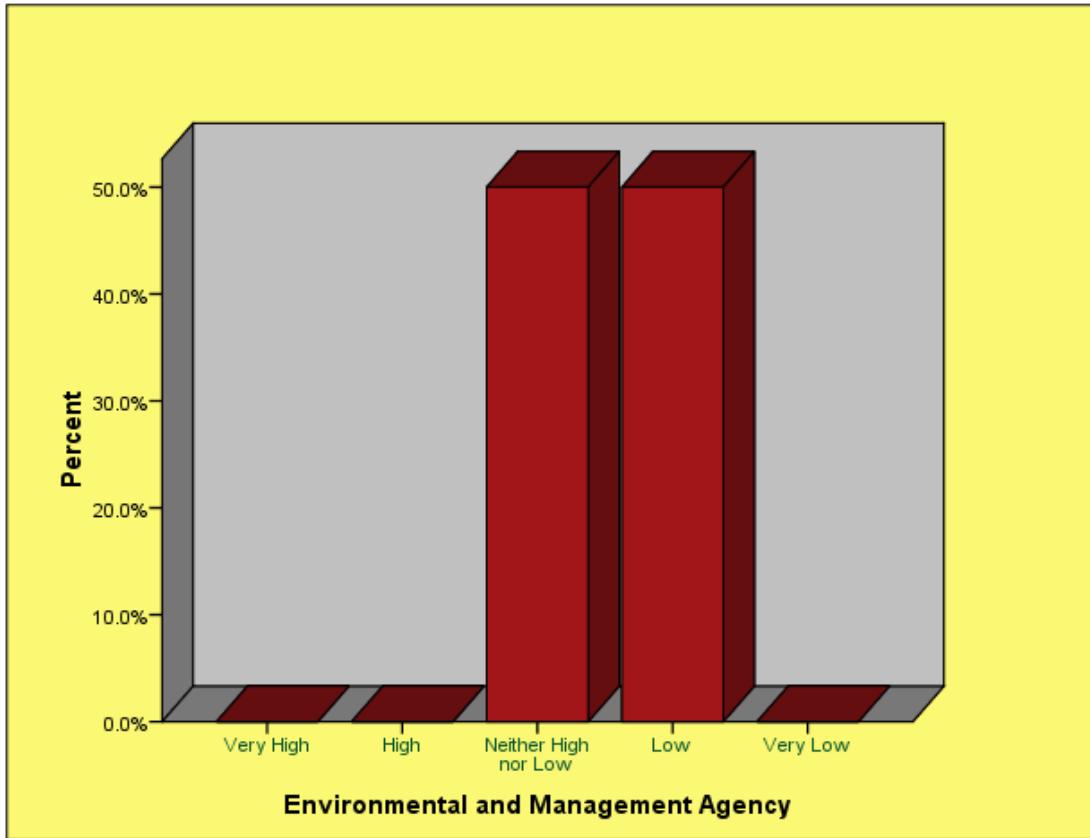


Source: Primary Data

The results from the study indicates that 3/10 (30%) of the respondents strongly agreed that disclosure of SEA information is important. 4/10 (40%) agreed to the same view, while 2/10 (20%) were neutral and 1/10 (10%) disagree to the same notion. The research revealed that 7/10 (70%) were in total agreement to the view that disclosure of SEA information is important to Marange Resources. A mode of 7 concur with K Basu and G Palazzo (2008) who postulated that SEA disclosure play a role in the creation and maintenance of corporate image and as a result influence customers, employees, and other group in the society.

The above information is representative that it is significant for mining companies in Chiadzwa to disclose information on social and environmental accounting.

Figure 4.4.1: Environmental Management Agency Response on Disclosures



Source: Primary Data

From the information obtained from an interview conducted with EMA official it came to light that management agency is not exclusively concerned with how Marange Resources disclose Environmental and social aspects but they are chiefly concerned with regulation of Environmental policies.

EMA agencies argued that in Zimbabwe no laws are laid down which do stipulates mining companies should mandatorily disclose their information on SEA. From the explanation the researcher got from EMA agency they outlined that their duty is to help with the regulation of Environmental and social aspects .They added that their responsibility is to review company’s operations and activities and to and carry out an environmental impact assessment prior their implication.

Conclusively the agencies stressed on the aspect of the significance of disclosure on environmental and social aspects since it gives a clear picture of Marange Resources operations and image. They emphasized the need for disclosure requirements which makes it easier for them to track costs related to the environment.

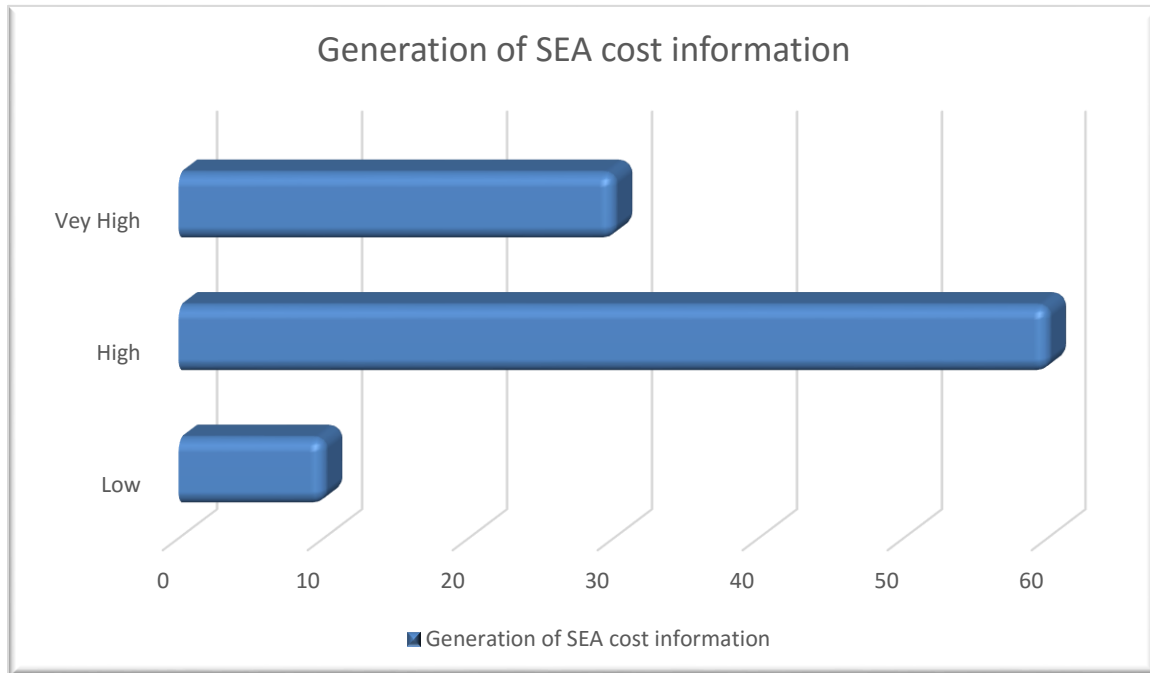
4.5. Guarantee that the financial statement of Marange Resources are complete and they can be of value to users of those financial statements

Financial statements can only be complete that is if when they show the true and fair view of what it purports to represent .So as the objective of financial reporting as per the Financial Reporting Standard Board (2010, FAS-1) the core objective of environmental accounting and reporting is to provide information to present and potential stakeholders for making rational decisions.

According to Pizzey (2008), corporate reports which disclose the financial performance and position of entities without significant environmental cost reporting will be showing a distorted view of business .To ensure on completeness of financial statements of Marange Resources questionnaires were dispatched to 10 respondents asking on the extent to which the company generate environmental and social information and reporting of such information.

Of the ten respondents who were asked to what extend do Marange Resources generate SEA information, six of the respondents respond that the company generate this information to a higher extent giving this response the highest frequency rate that is mode of 6/10.

Figure 4.5 SEA Generation and Reporting of the Information



Source: Primary Data

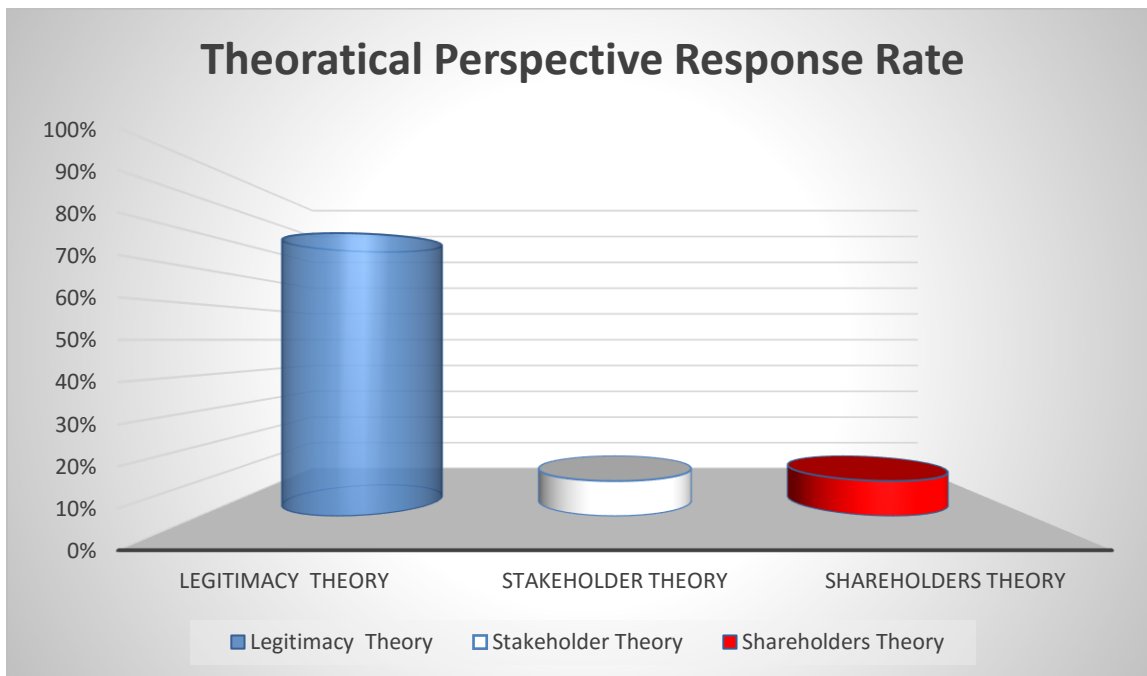
The above information as per the responses from questionnaires is representative that Marange Resources to a significant extent generate environmental information ,in the same breath the interviewed assistant accountant of Marange Resource made it clear that all information which is generated is reported in annual statements of the company.

With the extent of environmental cost generation amounting to 90% thus 60% from those respondent who agree that Marange Resources generates SEA information and 30% who strongly agree to that notion, it is exclusively representative of the fact that financial statements of Marange Resources are complete since all the information generated is reported .Hence in accordance to Pizzey (2008), the financial statements of Marange Resources show an non distorted business view since the company to a greater extend generate and report environmental cost information.

4.6. Theoretical Perspective of Social and environmental disclosure,

Ten questionnaire were dispatched, of the ten 8/10 (80%) of the respondent strongly agreed that Marange Resources is in support of Guthrie and Parker (2008) legitimacy theory since they argued that company persistently seeks to ensure that they are perceived as still operating within the bounds and norms of their respective society .The responses were expressed as a percentage and presented in the graph below

Figure 4.6 Responses on the Perspective of Reporting



Source: Primary Data

The majority of the questionnaire shows that all most everyone agreed that Marange Resources reports or discloses it social and environmental information being persuaded by the legitimacy theory .In contrary 1/10 (10%) of the respondents argued that the disclosure of the information is persuaded by the stakeholder's theory postulated by Ranatajongkoletal (2006 p. 69) since Marange Resources aims to be perceived as ethical thereby divulging its SEA implication information to all of its stakeholders thus it is in support of Gray etal (2010) stakeholders ethical branch. The remaining 1/10 (10%) being those who argued that Marange Resources social

reporting is persuaded by the shareholders theory since they argued that shareholders payoffs is the residual pay hence in the processing of maximising that payoff Marange Resources will taking care of all other stakeholders as postulated by Sundaram and Inkpen (2004).

The above information is representative that Marange Resources to a greater extent disclose its social and environmental information persuaded by the legitimacy theory since this has the highest frequency of supports 8/10 (80%-model rate) . The only challenge is that the company do not have a standard accounting procedure or policy which it follows on disclosure which leads to breach of the consistence concept of accounting.

4.7. Interview Responses

4.7.1. Suggestion of strategies for improving and influencing reporting of SEA information

In an interview conducted with the research questioning on the suggestions that might be put forward to improve and influence reporting the respondent highlighted that the best way to improve reporting is by following of international standards on disclosure such as the Global Reporting Initiative (GRI), also environmental impact assessment departments should suggest for mandatory disclosure of companies improvements on environmental issues. Three of the respondents (75%) from the finance department argued in favour of this suggestion which also was supported by Mc Elroy et al., (2005) who postulated that overall the fulfilment of environmental legislation appear to be the main motivation for adopting environmental accounting practises. One of the responder (10%) who had a different view suggests that the sensitivity of the activities of an organisation is an enough variable to influence the level of environmental disclosure of entities.

4.7.2. Importance of SEA disclosure for mining companies

Two of the responders (50%) who were interviewed supported K, Basu and G, Palazzo (2008) line of thinking which suggested that SEA disclosure leads to creation and maintenance of the corporate image of a company. However the other 50% argued in favour of Pizzey

(2008) view who watched the importance of disclosure as in reporting of financial statement which are not distorted since he postulated that reporting of financial statement without environmental cost information will result in reporting of distorted information.

4.7.3 Completeness of Financial Statement of Marange Resources

A question to ascertain the completeness of financial statements of Marange Resources was asked which is to what extent do Marange Resources generate SEA information. Of the four individuals who were interviewed all of them agreed that the company do generate the information, 3/4 (75%) strongly agreed that the company generate the information and 1/4 (25%) just agreed. This therefore signifies that with the generation and disclosure of SEA information the financial statement of the company are to a reasonable percent complete.

4.8. Chapter Summary

This particular chapter scrutinized on the response rate of the targeted population, data gathering, presentation and analysis. The manager obtained satisfaction that the company for sure is to a greater extent involved in SEA disclosure/reporting. Basing on the research results the study can conclude that there is no significant relationship between the pattern of reporting and the disclosure requirements due to the lack of an SEA framework. The next chapter comprehend conclusions and recommendations.

CHAPTER 5

CONCLUSIONS AND RECOMMEDATIONS

5.0 Introduction

This particular chapter happens to be the last chapter hence it focuses on the summaries, conclusions and recommendations that are drawn from research findings. It will establish the extent to which the research objectives of the study would have been addressed .A couple of recommendations will be given which the organisation understudy (Marange Resources) can adopt to improve their current Environmental and Social aspects as well as the accounting for those cost.

5.1 Chapter Summary

The sole purpose of this study was to evaluate the environmental and social accounting and reporting of Marange Resources (Pvt) Ltd. An evaluation of environmental and social accounting and reporting of the company was carried out by the researcher.

The research objectives of the of the study were to evaluate whether the reclamation and closure plan of Marange Resources is adequate, to find out the importance of social and environmental accounting disclosure for mining companies in Chiadzwa, to suggest strategies for improving and influencing the reporting of social and environmental accounting of mining companies in Chiadzwa, to ensure that the financial statements of companies mining in Chiadzwa are complete and they can be of value to users of those financial statements and lastly to suggest drivers and motives which can be used by Environmental Management Agency (EMA) to persuade social and environmental disclosure by companies operating in Chiadzwa.

Precisely the study weighed the level of individuality of tracking of costs impacting on the environment, level of efficiency and appropriateness of environmental cost and disclosure

reporting. Research methods utilised by the study was primary data survey and secondary data interpretation and for the purpose of data analysis descriptive content analyses and longitudinal content analyses were carried out.

Follow the study the researcher can safely conclude that environmental expenditure are not charged independently of other operating expenditure and that there is no accounting system for tracking of externality cost and environmental accounting practice does not impact on company performance in Zimbabwe.

Absence of classification of cost on environmental and social bases turned to be the major internal barrier which affect the ability of Marange Resources to collect environmental and social cost information .In Zimbabwe greater need still exist to prescribe standard of skills in the principles and practice of environmental and cost and management accounting .

The research assessed the importance of having an adequate reclamation and closure plan, it does helped again in finding out whether Marange Resources holds one. The study concluded that Marange Resource (Pvt) Ltd has a reclamation plan however the plan needs to be reviewed and updated after a certain interval ,lack of updating leads to a mere conceptual plan that is a theoretical plan rather than an actual plan that relates to site-specific characteristics of the area impacted by mining.

Rightly observed by Salomone and Gallucio (2001:34) that ‘descriptive non-financial information cannot help the reader to comprehend the interactions between the company and the environmental and social in quantitative and financial terms’. They therefore gave the opinion that ‘qualitative disclosure must be accompanied by the same type of precise and clear financial information that is useful to reconstruct the economic consequences deriving from environmental and social problems’

It is therefore in the same breath considered that although environmental and social information could be published in other company forms such as in social reports ,press release ,company websites ,among others but it is only in AFS /corporate annual reports can these information be authentic ,acceptable and justifiable

Assessment for suggestions of strategies to improve and influence the reporting of SEA information were carried out the study divulge that there was a greater in consistence in the way in which SEA information is reported since there is no any guideline to be followed reporting and disclosure .

Research finding avow the fact that EMA is not so concerned with environmental issues disclosure ,in accordance to them their chief concern is on environmental regulation and protection policies .EMA official did argued that in the country no specific rule or regulations which are laid down which stipulates that mining companies should mandatorily disclose SEA information .

5.2. Conclusions of the study

Environmental and Social aspects were the main focus of the study. The study was done mainly focusing on diamond mining companies specifically Marange Resources (Pvt) Ltd. Background of the problem, research objectives, underlying assumptions and its beneficial effects to stakeholders were emphasised with the study.

The study highlighted a detailed conceptual framework. Several theories on environmental and social accounting and reporting played a vital role in elaborating some of the possible needs for environmental and social accounting.

Research methods were applied to investigate stakeholder perceptions, opinions and motives behind environmental and social accounting; this was seen as crucial exercise. Sources of primary and secondary data were meticulously defined, highlighting their merits and demerits. Random sampling was utilised to acquire the sample size which is a correct representation of the entire population .Raw data was accessed through questionnaire which were dispatched to target population.

Via questionnaires and interviews raw data was collected, analysed and presented there after collection. Data analysis techniques which were utilised are inclusive of descriptive data analysis, statistical data analysis (mode) and the longitudinal content analysis .The data was

presented via pie charts, tables and graphs. Conclusions were reached whilst recommendations were proposed by the study to Marange Resources.

5.3. Recommendations of the study

- I. Standard definition should be agreed upon for environmental expenditure for the purpose of annual reports on Environmental and Social Accounting in the mining sector. Marange Resources can adopt the United Nations Environmental Management Accounting Guideline which will facilitate the formulation of Generally Accepted Accounting Principles (GAAP) in the country which will evolve environmental accounting practice. This will not only enhance SEA aspects in Zimbabwe but rather it will as well enable for joining of global campaign for environmentally enhanced society.
- II. Zimbabwe Accounting Board (ICAZ) with other professional institutes in the country should take into consideration the growing awareness in Environmental and Social accounting and formulate disclosure requirements. Mandatory SEA disclosure implementation has far reaching effects in assisting enhancement of SEA issues as postulated by Frost (2007 ,p .201) after a his case study of Australian Corporation Law.
- III. In developing countries statutory disclosure of environmental and social aspects is at an increasing rate becoming the practise, ICAZ and EMA should formulate statutory requirements for organisations to adhere to .This will without doubt enhance environmental responsiveness and corporate social responsibility if the organisation are to remain in business. As postulated by Mc Elroy et al., 2005 that the implementation of environmental legislation is the only way to enhance environmental responsiveness

5.4. Suggestions for Further Research

According to Jenkins and Yakovleva (2006), in terms of social and environmental disclosure large mining companies in prior researches are reported disclose heterogeneously, each firm using a unique way to disclose (Perez and Sanchez) .This therefore give room for further

research of generally accepted accounting disclosure standards which can be followed in order to promote uniformity of disclosure of social and environmental accounting information.

Also most prior studies of SEA have not identified the particular items that are being disclosed by enterprises except to classify them broadly as environmentally related. A further research can be carried out to assess basis of classifying cost and breaking down environmentally related costs.

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Midlands State University

P. Bag 9055

Gweru

15 April 2014

The Finance Director

Marange Resources (Pvt) Ltd

6 Constantia Ave Strathaven

Harare

Dear Sir

REF: REQUEST FOR PERMISSION TO GATHER INFORMATION

I am a final year student, studying towards a Bachelor of Commerce Accounting Honours Degree at Midlands State University. It is a Department's requirement for students to carry-out a research during the final semester, to be submitted to the faculty for endorsement. My research topic is entitled: *"An evaluation of environmental and social accounting and reporting of mining industry in Zimbabwe. Case of Marange Resources (Pvt) Ltd.*

It is my utmost wish to attain responses from the sampled members of staff. I therefore kindly seek your assistance by giving me the consent to distribute questionnaires to the sampled members of staff from your organisation.

Findings will be held in confidence and be used for academic purposes only. If you have any information that you would like to know concerning this research, please feel free to contact me on +263 775 674 052, email singeability@gmail.com or to the Department of Accounting Chairperson, email mvurap@msu.ac.zw.

Your assistance will be greatly appreciated

Yours faithfully Ability Singe (R104799N)

APPENDIX 1: QUESTIONNAIRE FOR FINANCE DEPARTMENT

**MIDLANDS STATE UNIVERSITY
FACULTY OF COMMERCE
DEPARTMENT OF ACCOUNTING**

QUESTIONNAIRE

The researcher is SINGE ABILITY a student at **Midlands State University** pursuing a Bachelor of Commerce Accounting Honours Degree. As a requirement for the completion of the degree program, students are required to carry out a research project on a problem of their choice subject to authorities' approval. As such the student is undertaking a research on **“An Evaluation of Environmental and Social Accounting and Reporting of mining industry in Zimbabwe: Case of Marange Resources”** You are hereby kindly requested to assist in the research by responding to the following questions as truthfully as you can. All the information you will provide will be used solely for the purpose of this study and will be treated with utmost confidentiality. Your cooperation in this regard will be greatly appreciated.

INSTRUCTIONS:

- Please answer all questions fully and honestly.
- Where boxes are provided indicate your answers by ticking in the appropriate box.

QUESTIONNAIRE-FINANCE DEPARTMENT

PERSONAL INFORMATION

1. Gender: Male Female

2. Highest Qualification (and Professional qualification, if any): _____

3. Company name: _____

RESEARCH INFORMATION

SECTION A: ENVIRONMENTAL OPERATING EXPENDITURE

1. To what extent does your company generate environmental cost information?

a.) Very high b.) High c.) Neither High nor Low d.) Low e.) Very low

2. Which of the following statements (a - e) best describe how you generate this information:

a.) Generated as part of your general ledger system.

b.) Generated as part of your management accounting system, separate from your general ledger system.

c.) Generated by a free standing system, using data electronically transferred from your general ledger or management accounting system.

d.) Generated by a free standing system, which does not directly access data in other systems, including non-automated methods.

e.) Generated by some other type of system.

3. Who are the recipients of the information?

a.) Accounts Dept. only b.) Management accounting system c.) Environmental only

d.) Corporate Dept. only e.) Corporate & Environment

f.) Mgt. Accounts & Financial Accounts. Dept. g) Environment, Corporate, Plant & Accounts

4. What internal barriers affect the ability of the company to collect environmental cost information? Indicate how much you agree or disagree in the box's provided below.

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
Absence of classification of costs on environmental bases.					
Training in Environmental Accounting is yet to take place.					
Environmental Accounting is yet to be enforced.					
d) Others (Specify please)					

5. To what level does the company make estimates of the less tangible environmental costs or benefits such as liabilities from past operations, the indirect cost of regulation, the benefit of environmental pro-activity, etc.?

- a.) Very high b.) High c.) Neither High nor Low d.) Low e.) Very low

6. To what extent are environmental operating expenditures tracked independently of other operating expenditure?

- a) Very high b.) High c.) Neither High nor Low d.) Low e.) Very low

7. To what extent do these techniques differ from those used to evaluate non environmental projects?

- a.) Very high b.) High c.) neither High nor Low d.) Low e.) Very low

SECTION B: ENVIRONMENTAL COST ACCOUNTING SYSTEM

8. To what extent are environmental capital expenditures tracked independently?

- a.) Very high b.) High c.) Neither High nor Low d.) Low e.) Very low

9. What division decides whether a project should be classified as environmental?

- a.) Corporate only b.) Environment only c) Plant only
d.) Management/Financial Accounting only e.) Environment & Corporate

f.) Plant & Environment g.) Environment, Corporate, Environment & Accounting

10. At what level at which environmental & social capital budgeting occurs

a.) Corporate only b.) Environment only c.) Plant only

d.) Management/Financial Accounting only e.) Environment & Corporate

f.) Plant & Environment g.) Environment, Corporate, Plant & Accounting

11. What techniques are used to evaluate the feasibility of environmental projects?

a.) Profitability Index b.) Return on Total Assets c.) NPV d.) IRR

e.) Payback f.) ROI

12. Disclosure of SEA information created and maintained the corporate image of Marange Resources and helps to secure long term existence of the company

a.) Strongly agree b.) Agree c.) Neutral d.) Disagree e.) Strongly disagree

13. Which of the following theoretical perspective of social and environmental disclosure best describes the theory which persuade Marange Resources disclosure of SEA information.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Legitimacy Theory					
Stakeholders Theory					
Shareholders Theory					

APPENDIX 2: QUESTIONNAIRE FOR SHE DEPARTMENT

**MIDLANDS STATE UNIVERSITY
FACULTY OF COMMERCE
DEPARTMENT OF ACCOUNTING**

QUESTIONNAIRE

The researcher is SINGE ABILITY a student at **Midlands State University** pursuing a Bachelor of Commerce Accounting Honours Degree. As a requirement for the completion of the degree program, students are required to carry out a research project on a problem of their choice subject to authorities' approval. As such the student is undertaking a research on **“An Evaluation of Environmental and Social Accounting and Reporting of mining industry in Zimbabwe: Case of Marange Resources”** You are hereby kindly requested to assist in the research by responding to the following questions as truthfully as you can. All the information you will provide will be used solely for the purpose of this study and will be treated with utmost confidentiality. Your cooperation in this regard will be greatly appreciated.

INSTRUCTIONS:

- Please answer all questions fully and honestly.
- Where boxes are provided indicate your answers by ticking in the appropriate box.

Questionnaire to the Security, Health and Environment (SHE) Department

The survey of the awareness and implementation of Social and Environmental Accounting in your company.

I, Information of Respondent

1, Position held in Department: _____

2, Age: _____

3, Gender: Male Female

II, Questions to ask for the understanding about social and environmental accounting:

1: I understand the meaning of “Social and Environmental Accounting”.

Strongly agree Agree Neutral Disagree Strongly disagree

2: I am aware of the link between social and environmental accounting and Sustainable Development.

Strongly agree Agree Neutral Disagree Strongly disagree

3: The cost and benefit of social and environmental issues should be quantified in the Social and Environmental report?

Strongly agree Agree Neutral Disagree Strongly disagree

III, Questions to ask for the implementation of social and environmental accounting in your company:

1: Implementing social and environmental accounting is important to the sustainable development of the company.

Strongly agree Agree Neutral Disagree Strongly disagree

2: My Company voluntarily involves in developing or supporting environmental and social programs as follows:

Providing charitable funds

Supporting people in flood areas

Participating into gratitude events (for heroic mothers, dead and wounded soldiers)

Educating the awareness of environmental protection

Preventing air pollution/ water pollution

Collecting, recycling, reuse, and proper disposal of products

Others (please specify:)

3: My Company has an accounting system to quantify the cost and benefit of social and environmental programs?

Strongly agree Agree Neutral Disagree Strongly disagree

4: It is necessary to include the Social and Environmental report in the annual report or sustainability report?

Strongly agree Agree Neutral Disagree strongly disagree

5: How can environmental and social accounting be enhanced or included in the annual reports of mining companies?

.....
.....

III, Awareness of Reclamation and Closure Plan

1: My Company have a Reclamation and Closure Plan

Strongly agree Agree Neutral Disagree strongly disagree

2: To what extent is it important to have an adequate Mining Reclamation and Closure Plan?

Important Very Important Moderately important Of little importance
Unimportant

3: The Reclamation and closure plan present an actual (rather than merely conceptual) plan that relates to site-specific characteristic of the area impacted by mining.

Strongly agree Agree Neutral Disagree strongly disagree

APPENDIX 3: INTERVIEW GUIDE FOR THE CHIADZWA COMMUNITY

Section A

1. Age: _____
2. Gender: Male Female
3. Educational Qualifications: _____

Section B

4. Do you understand the term Environmental and Social Accounting and what it is all about?
5. Do Marange Resources (Pvt) Ltd participate in regulating/implementing environmental and social policies?
6. Do you require that Marange Resources (Pvt) Ltd to disclose in their reports the costs and benefits of Environmental and Social Accounting?
7. Does the implementation of Environmental and Social Accounting lead to sustainable development in the community of Chiadzwa?
8. Does Marange Resources voluntarily get involved in the development or support of Environmental and Social programs in your community?
9. Have you ever benefitted from any Social programmes from Marange Resources?

APPENDIX 4: INTERVIEW GUIDE FOR THE FINANCE AND SHE DEPARTMENT.

Finance Department

Research topic: An Evaluation of environmental and social accounting and reporting In mining industry in Zimbabwe .Case of Marange Resources (Pvt) Ltd.

Section A

1. Name: _____ ,
2. Age: _____ , Gender: Male Female
3. Educational Qualifications: _____

Section B

4. Have you been oriented on the basic principles of the social and environmental accounting and reporting?
5. What are some of the challenges you face in the collection of environmental information.
6. How do you disclose information on social and environmental accounting activities (as standalone reports or as part of your financial statements)
7. What is the significance of environmental and social accounting and reporting to Marange Resources (Pvt) Ltd
8. Do you have any accounting standard you follow on environmental accounting issues for example Global reporting Initiative (GRI)
9. Your opinion what should be done to improve the discloser of environmental and social accounting issues by Marange Resources?

APPENDIX 5 INTERVIEW GUIDE-The SHE Department

Research topic: An Evaluation of environmental and social accounting and reporting

In mining industry in Zimbabwe .Case of Marange Resources (Pvt) Ltd.

Section A

1. Name: _____ ,
2. Age: _____ , Gender: Male Female
3. Educational Qualifications: _____

Section B

4. Do you understand the term Environmental and Social Accounting and what it is all about?
5. Are you aware of the link between Social and Environmental Accounting and Sustainable development?
6. Do Marange Resources (Pvt) Ltd participate in regulating/implementing environmental and social policies?
7. Do you require that the Marange Resources disclose in their reports the costs and benefits of Environmental and Social Accounting.
8. Does the implementation of Environmental and Social Accounting leads to sustainable development of Marange Resources (Pvt) Ltd?
9. Does the implementation of Environmental and Social Accounting lead to sustainable development in the community of Chiadzwa?
10. Does any of the Mining Companies voluntarily get involved in the development or support of Environmental and Social programs?
11. What are the key aspects of environmental issues you deal with as a department?
12. Do you have any challenges you face as a department pertaining environmental issues

APPENDIX 6: INTERVIEW GUIDE FOR ENVIRONMENTAL MANAGEMENT AGENCYS

INTERVIEW GUIDE-EMA Agency's

Research topic: An Evaluation of environmental and social accounting and reporting

In mining industry in Zimbabwe .Case of Marange Resources (Pvt) Ltd.

Section A

1. Name: _____ ,
2. Age: _____ , Gender: Male Female
3. Educational Qualifications: _____

Section B

4. Does your organization participate in regulating/implementing environmental policies in Chiadzwa?
5. Please, outline other government departments/agencies apart from yours which are known to be saddled with Environmental Control responsibilities
6. Do you require the project operator to demonstrate that due consideration is given to the need to comply with relevant legal requirement?
7. To what extent do you require that there be words of disclosure on environmental issues including energy conservation in financial reports of operators?
8. Does your organization communicate to applicant potential of environmental problem when considering application?
9. Do you undertake site inspection of all applicants/operators' projects to record and check the effectiveness of site management and identify any required action?
10. Do you require operators to remit reports to your department/organization on annual or other regular basis?

Thank you for your time

