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**EFFECTIVENESS OF ENVIRONMENTAL IMPACT ASSESSMENT IN
SAFEGUARDING CULTURAL HERITAGE SITES: THE CASE STUDY OF GLOBE
AND PHOENIX**

BY

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AND HERITAGE STUDIES DEGREE.**

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DEDICATION

This academic presentation is dedicated to my wonderful parents Mr and Mrs Gwengwe for their never ending love and support both emotionally and financially , as well as my Uncles John and Kimpton for their moral support and being a pillar of my strength when hope seemed to be lost.

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Last but not least I would like to thank the Lord Almighty for the divine protection, guidance, wisdom and correction throughout this period.

ABSTRACT

The study evaluates the effectiveness of Environmental Impact Assessment as a method used to mitigate and prevent negative impacts on cultural heritage sites in Zimbabwe. Globe and Phoenix in the City of Kwekwe of the Midlands Province Zimbabwe was chosen as a case study. The research adopted qualitative research methods. Data was collected using observations, documentary reviews and interviews. Purposive sampling techniques were employed in the selection of respondents to the study. Data were analysed using thematic analysis. The study found out that the implementation of EIA was challenged and sometimes ineffective in the protection of cultural heritage sites. The results of the study also revealed that EIA was being ineffective due to a number of challenges that were being encountered by those institutions responsible for the protection of Cultural heritage sites. The study concluded that EIA was effective to a lesser extent due to ineffective legislative framework and the challenges being encountered. In view of the findings the study recommended that institutions such as EMA mount awareness campaigns and conduct civic education programmes to strengthen the implementation of EIA and the safeguarding of cultural heritage sites. Furthermore the study recommended effective law enforcement towards the protection of cultural heritage sites and also the revision of the guidelines which guide all developers before commencing their development projects. In conclusion the study also highlighted areas for further research.

LIST OF ABBREVIATIONS AND ACRONYMS

NMMZ	NATIONAL MUSEUMS AND MONUMENTS OF ZIMBABWE
EIA	Environmental Impact Assessment
EMA	Environmental Management Agency
UNESCO	United Nations Educational, Scientific and Cultural Organization
ENP	Equatorial Nile Project
CHIA	Cultural Heritage Impact Assessment
NEMA	National Environment Management Authority
NMK	National Museum of Kenya
AIA	Archaeological Impact Assessment
CHA	Cultural Heritage Assessment

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CHAPTER 1

1.1 Introduction.

United Nations Educational, Scientific and Cultural Organisation (UNESCO) states that cultural heritage refers to the tangible and intangible artefacts, traditions, customs, beliefs, practices, languages, music, dance, literature, art forms, architecture and other expressions of human creativity that have been passed down from generation to generation (UNESCO, 1945). Cultural heritage is an important aspect of human existence which reflects past, present and future hence there is need to preserve it. Modern developments like mining and infrastructural developments have made it difficult to safeguard cultural heritage. Due to the ongoing mining and infrastructural developments, cultural heritage is at risk like never before thus it is important that predevelopment assessments in the form of Environmental Impact Assessment be carried out.

According to International Association for Impact Assessment (IAIA 2005) Environmental Impact Assessment is a process that identifies and provides recommendation for mitigating those impacts. Although EIA mitigates negative impacts on the environment, there is need to evaluate the effectiveness of EIA in safeguarding cultural and heritage site giving particular attention to Zimbabwe. This study specifically focuses on Globe and Phoenix located in the city of Kwekwe of the Midlands Province which has encountered disturbances emanating from mining which in turn complicates the safeguarding of the cultural heritage sites.

In an effort to come up with a plausible verdict towards the evaluation of EIA the focus of this chapter is on the background, purpose of the study, the statement of the problem, objectives, questions, assumptions, significance, delimitations and limitations of the study. It also defines key terms.

1.2 Background of the study.

Industrialisation, Urbanisation and population growth creates a dilemma which has resulted in culture and heritage experiencing threats never experienced before. A variety of minerals like petroleum, gold, diamonds, and natural gas resources discovered in large quantities in Africa near heritage properties resulted in cultural heritage sites facing possible collapse which pose challenges to effective heritage protection such as the implementation of EIA. Due to the discovery of different minerals, most African countries now regard minerals like gold as sign of prosperity and an opportunity to improve their living conditions.

Due to the fact that Africa's economy relies upon the mining industry mitigation measures arising from development which surrounds heritage sites has become a complication. As stated by the HANYANI NEWS (2022) some African countries like Zimbabwe, specifically in Kwekwe at Globe and Phoenix have seen reports of gold panners invading historical sites which include leaving them facing possible collapse. As stated by the HANYANI NEWS (2022) some African countries like Zimbabwe, specifically in Kwekwe at Globe and Phoenix have seen reports of gold panners invading historical sites which include the Paper House. According to ZimFeildGuide the Paper House is made of wood and cardboard, papier-mach and wire mash, in white paint and in striking green paint .This prefabricated two bedroom structure was constructed on wooden stilts in 1894 and it housed Mr H.A Piper the first Globe and Phoenix Mine manager and is the only remaining building of its type. It is also believed that Cecil John Rhodes slept in the Paper house during his expeditions.

Globe and Phoenix is a historic mining site located in Kwekwe City in the Midlands Province in Zimbabwe. At Globe and Phoenix, mining activities have often experienced negative impacts towards the environment, especially on the cultural heritage sites located at Phoenix House. The destruction of cultural heritage sites in Globe and Phoenix affected by mining activities go against the concept of sustainable development which aims at creating a balance

between development and protection of resources for the benefit of both the current and future society.

Sustainable development according to Raworth (2017) is a process of economic, environmental and social change in which resources extraction, investments, technological development orientation and institutional change enhance current and future potential to meet human needs. According to Selfslagh (2002) sustainable development is of paramount importance to livelihoods which is the epicentre of culture and heritage .The ability of cultural heritage in shaping peoples way of life to show the significance of safeguarding cultural heritage sites.

According to Smith (2009) the idea of sustainable development holds strongly to development that is sustainable indefinitely. In this regard Akagawa (2009) pointed out that many societies in Africa has explained this theory through religious and sacred possessed by heritage sites. An analysis of these sites will reveal that the people surrounding the heritage sites have extracted the resources from the site while making sure that the sites remained intact indefinitely. Heritage sites cannot be replaced. Sustainability of natural heritage is easy to achieve than that of cultural heritage.

Globalisation and industrialisation has resulted in most countries around the world seeking development initiatives to providing simple infrastructure for their citizens which in turn leads to adjustments on the natural and cultural environment. To prevent the adjustment on the natural and cultural environments, mitigation measures have been set in place in the form of environment laws which provide plans to guide in development and they change the social, cultural and natural environment. These environmental policies state that environmental impact assessments should be carried out before any development project begin.

In countries like Zimbabwe mitigation measures to protect culture and heritage sites were being ignored for a period .Projects were usually approved and conducted without any EIA

consultation leading to destruction of several heritage sites. In some cases, reports were made after heritage sites had been destroyed, hence the need to evaluate EIA being conducted in an effort to safeguard culture and heritage.

1.3 Purpose of the study.

The purpose of the study is to investigate the effectiveness of the EIA towards the safeguarding of cultural heritage sites focusing on Globe and Phoenix in Kwekwe.

1.4 Statement of the problem.

Mining and infrastructural development taking place in the city of Kwekwe is resulting in the destruction of cultural heritage sites (HANYANI NEWS 9 November 2022). The effectiveness of EIA in the safeguarding of heritage resources is unnoticed. EIA is a tool used to identify the environment, social and economic impacts of a project. EIA aids to decision making on whether the project should proceed or not. There has always been pressure on the environment because of industrialisation and this has made protection or preservation of cultural heritage sites difficult, due to the weakness in the legal frameworks which protect the environment. The study seeks to evaluate the impact of EIA in the safeguarding of cultural heritage resources in Kwekwe District, a case study of Globe and Phoenix.

1.5 Objectives of the study.

- To investigate the implementation EIA.
- To acquaint with guidelines used in the protection of cultural heritage sites.
- Effectiveness of the implementation of EIA.
- To identify other authorities involved in EIA.

1.6 Research Question

1. Are there any steps taken before a development project is implemented?
2. What guidelines are used for the protection of cultural heritage sites?
3. How effective is EIA in protecting cultural heritage sites at Globe and Phoenix?

4. What other authorities are involved in EIA?

1.7 Assumption of the study.

The study assumes that there could be challenges in the implementation of EIA at cultural heritage sites that affect cultural heritage site. Officers may be challenged with skills competence or knowledge deficiencies. The research assumes that respondents will give genuine responses to the inquiry. Officers may be challenged with skills competence or knowledge deficiencies. The research assumes that respondents will give genuine responses to the inquiry.

1.8 Significance of the study.

EIA enables the project decision makers to think about the possible outcomes on the environment before any development can be conducted to avoid or minimize negative effects. The above statement reveals the importance of the study as we witness the continuous destruction of cultural heritage sites yet EIA officers seem not to take an active role in alleviating negative environmental impact. The relevance of this study is to create awareness on the importance of safeguarding cultural heritage to policy makers, developers who conduct their projects near heritage sites and the general populace that benefits from the cultural heritage. Awareness on what role cultural heritage plays in our daily life will be provided and the weakness or challenges being faced in the protection of cultural heritage will be discussed to provide possible solutions for the safeguarding of cultural heritage.

The study will not only benefit the developers and custodians of cultural heritage, but will benefit everyone as it will also uphold the notion of sustainable development. Sustainable development aims at meeting the development of the present without compromising that of the future generation which in turn creates a balance between development and the safeguarding of cultural heritage which shows that both areas could coexist.

1.9 Preliminary Literature review and theoretical framework.

Ongoing mining and infrastructural development have brought about the destruction of cultural heritage which in turn has brought about questions towards the pre-development assessment required before any project is conducted such as the EIA. The information below will present information which validates whether the implementation of EIA has been effective in the safeguarding of cultural heritage in Zimbabwe using the case of Globe and Phoenix in the city of Kwekwe. Information on how EIA came to be will also be presented.

Management of the environment is the process of protecting and preserving natural resources and the ecosystem while also ensuring sustainable development. Mukwindidza (2008) categorises the conservation practices into three phases which comprise of the precolonial management, colonial period and post-colonial period. The precolonial management was characterised by traditional way of heritage conservation methods whereby traditional leaders and beliefs played an important role in managing the environment. Additionally the colonial period management was controlled by the laws that separated the indigenous people from their environment and lastly the post-colonial period which involves improvements of the laws to match the international condition and changes.

In Zimbabwe the environment was managed by the Natural Resources Act that was first passed in 1941. The act was a law passed by the colonial government of Rhodesia that gave the state control over the natural resources in the country. The act gave the settler government the ability to issue licenses for mining, hunting, and fishing and to control the use of land for agriculture and forestry. However, the Natural Resources Act of 1941 was enfeebled by a series of events that followed such as the Unilateral Declaration of Independence (UDI) in 1965.

On 11 November 1965 Rhodesia (Zimbabwe) the former British colony in Southern Africa declared its independence unilaterally because the white minority government opposed the British governments plans to grant independence to Rhodesia under black majority rule. The

UDI resulted in the country being put under sanctions and this had ripple effects on the management of the environment specifically cultural heritage. The UDI also resulted in economic decline whereby the sanctions imposed on Rhodesia had a severe impact on its economy, the country's exports were severely restricted and it struggled to attract foreign investments.

1980 after independence the government of Zimbabwe was eager to uplift its economy at any cost which led to projects being conducted without impact assessments being conducted. Impact Assessments like EIA were viewed as a barrier which delayed commencing of projects, of which the country was relying on those projects to uplift its economy. The commencing of projects without any impact assessment was causing negative impact to the environment hence the reason why the first EIA regulations of the Environmental Management policy (1994) made it intentional to conduct EIA for a project.

In an effort to safeguard the cultural heritage, flora and fauna in 1997 Environmental Management Bill was passed therefore the Zimbabwe Environmental Management Act of 2002. This also resulted in EIA being compulsory so that no project would occur without an environmental impact assessment. The Act resulted in the formation of Environmental Management Agency (EMA) which advised the Ministry for Environment and Tourism on matters involving the development and management of the environment which included the safeguarding of cultural heritage sites which could act as tourist attraction centres.

EMA is a government department responsible for enforcing the Zimbabwe's EIA law. If in any case a developer assumes development without conducting an EIA, EMA has the authority to halt the projects until proper measures have been taken. There are cases whereby development projects have been stopped at the Globe and Phoenix mine following non-observance of the EIA. The Herald newspaper (15 March 2007) reported that one of the oldest mines in the country had been closed due to failure to produce an EIA report. However, EMA is experiencing challenges in trying to implement the rules and to monitor development

effectively due to lack of support and compliance from other responsible authorities. Due to the reports made towards Globe and Phoenix it can be assumed that EMA may be experiencing challenges in trying to implement the rules and to monitor development effectively due to lack of support and compliance from other responsible authorities.

According to Nhamo (2003) the Environmental Management Agency is expected to oversee the environmental impact assessment procedure, utilisation and management of ecologically fragile ecosystems and safeguard the environment. According to the environmental management Act Section 2e (b) environment refers to habitats, spatial surroundings, ecosystems or other constituent parts which includes modified or natural or man-made including, agricultural, rural landscapes, urbanized areas and areas of cultural importance.

In Zimbabwe EIA is an interdisciplinary process where professionals specialized in different areas form interdisciplinary groups to conduct assessments. The need for Environmental Impact Assessments interdisciplinary groups has the benefit of making sure that impacts of the development on most of the aspects ranging from animal to human wellbeing are considered before carrying out any development project.

Moreover, there are three phases when conduction EIA. Desktop survey is the first stage this is when the developer seek advice from the National Museums and Monuments Archaeological survey (the national site register) for a list of the known sites in the area that could be disturbed by development. This stage mostly include Archaeological survey unit of the National Museums and Monuments consultation which has more than 16 000 cultural and natural heritage sites in its records. Information on the location, names, condition and current conservation challenges found at the site are contained in its records. Site information can lead one to determine the condition and destiny of sites in the area before the carrying out of any survey. The archaeological survey is the most significant process for establishing the archaeological baseline in the area where development is to be carried out. Sites listed in the

archaeological survey involve sacred sites, landscapes, historical sites like buildings, archaeological sites and graves. Stage two is field assessment (site survey) and stage three is mitigation.

Another major issue included in heritage impact assessment is participation local communities in the EIA process. Zimbabwe during the colonial period policies on land management relocated people from their areas of origin. Most of these communities still have ancestral graves and sacred places. These sites could lose their values due to development therefore the need to include communities. There are also other social issues that could be raised these include pollution affects the communities , for example the Houghton Park pollution case were a lawsuit was filed because of companies that had violated state environmental laws by failing to properly handle and dispose of hazardous waste. The contamination had resulted in elevated levels trichloroethylene in the soil and ground water at Houghton Park posing a risk to public Health. The issues outlined in the EIA report are the justification for the need for EIA and it is also to meet the environment baseline and the environment statement.

1.10 Delimitations.

Delimitations are defined as boundaries of the study within the researcher's control (Creswell 2014). The goal was to investigate the impact of EIA in the protection of cultural heritage. The focus was on the effectiveness of EIA and whether or not responsible authorities were encountering any barriers or challenges in protecting cultural heritage. Furthermore attention was directed at the possible causes leading to EIAs not being conducted or not being thoroughly executed. Additionally particular attention was on impact of EIA and the organisations responsible for safeguarding of cultural heritage.

1.11 Limitations

Limitations are what withhold us from producing a summed up data collection of a study both technically and theoretically (Simon, M.K. 2011). The study was mainly affected by absence

of some of the respondents who had business trips which in turn had an impact on the type of data gathered. Furthermore due to the nature of the research some of the information required during data collection could not be disclosed as it was against the agencies rule and regulations.

1.12 Ethical considerations.

The research took into consideration issues to do with confidentiality, anonymity informed consent, deception of respondents and privacy. Participation was entirely voluntary and research participants were asked to sign consent forms (Greet, 2005). The research took into consideration issues to do with confidentiality, anonymity informed consent, deception of respondents and privacy. Participation was entirely voluntary and research participants were asked to sign consent forms (Greet, 2005). The participants will be enlightened on the research and how the research is going to use data during the data collection period. It is important for participants to be aware especially the one giving out the information in case any threats may surface targeting the one was accessing the data.

1.13 Definition of key terms.

Environmental Impact Assessment

According to Lee and George (2000) EIA is a process of evaluating, mitigating and predicting the social, natural and other relevant effect of development proposals prior to major decisions being taken. Moreover the United Nations Environmental Programme (UNEP 2019), defines Environmental Impact Assessment as a procedure of evaluating environmental impacts of a proposed project taking inter-related, human-health and cultural impacts, socio-economic both beneficial and adverse into account.

Safeguarding.

Safeguarding according to (UNESCO 2003) refers to measures aimed at ensuring the protection and preservation of the cultural heritage of humanity against all threats, whether natural or human induced.

Cultural Heritage sites.

The International Council on Monuments and Sites (ICOMOS 2011) defines cultural heritage sites as places that are valued for their cultural significance and are protected by law or other means.

Cultural Heritage.

UNESCO (2003) defines cultural heritage as the legacy of physical artefacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations.

Mitigation

United Nations Environment Programme (2019) defines mitigation as the measures taken to limit the adverse effects of environmental degradation.

1.14 Dissertation Outline.

The study is divided into five chapters and it is defined below.

1.1 Introduction.

This chapter will outline the current condition of information on the topic and identifies gaps or limitations in previous research that the study aims to report. It consist of the introduction to the study ,the background of the study, purpose of the study, statement of the problem , research objectives, research questions, assumptions, significance of the study, delimitations, limitations and definitions of key terms. By providing this information it assist the readers understand the rationale behind the study and its potential contribution to advancing in a particular field

Chapter 2: Literature review and theoretical framework.

This chapter provides an overview of the existing research and knowledge on the effectiveness of Environmental Impact Assessment in safeguarding cultural heritage sites case study of Globe and Phoenix while a theoretical framework outlines the underlying principles and concepts that guide the research (Creswell, J.W.2014) This focus is to review available related literature so as to trace the factors that contributed to the development of EIA. The chapter will include literature on implemented concepts of sustainable development, previous impact assessments carried out in African countries, significance of cultural heritage and impact assessments and EIA in Zimbabwe.

Chapter 3: Research design and Methodology.

This chapter provides a framework for conducting a laborious and systematic investigation into a particular research question. . The chapter is focused on the methods used to attain the information required. The research will further explain why case studies and research participants were selected as well as the data collection methods and how the data will be analysed and processed (Braun, V. ,and Clarke, V 2006). Additionally the chapter will also deal with research instruments used.

Chapter 4: Data presentation, analysis and discussion of findings.

The chapter is a sequence of process that involve organizing, interpreting and communicating data in a meaningful way. Furthermore, data presentation highlighted provides a presentation to make it easier for the reader to understand the information being presented. Data analysis involves evaluating the data to identify the connection. Lastly this section will present a discussion on the finding which involves interpreting the results of the data analysis and discussing their effects.

Chapter 5: Summary, Conclusion, Recommendations and areas for further discussion.

Chapter five closes the study with a summary of the whole dissertation and provides a conclusion and recommendations for EIA consultants, policy makers and Environmental management agencies, developers and cultural heritage practitioners.

CHAPTER 2

2.0 LITERATURE REVIEW AND THEORETICAL FRAMEWORK.

2.1 Introduction.

The purpose of this chapter was to review the available related literature so as to trace how EIA has been used before and how effective it was in the protection of cultural heritage. It also involved the definition and explanation of cultural heritage, its significance and that of Environmental Impact Assessment. The concept of sustainable development which is upheld within the EIA will be included and a presentation of African countries which have conducted EIA before in the African continent. . The aim was to investigate whether the implementation of EIA has managed to serve their purpose in Zimbabwe using the case study of Globe and Phoenix in the city of Kwekwe.

2.2 Cultural Heritage

Cultural heritage refers to artefacts or properties which are of cultural significance to the society, it includes tangible and intangible materials (Harrison et al 2008; Munjeri 2004; UNESCO 2003, Smith and Akagawa 2009). The day to day activities of Human beings are believed to shape by cultural heritage which in turn acts as a guide in their daily life. Cultural Heritage involves a variety of activities which includes visiting of culture and heritage sites, managing of tangible cultural heritage, interpreting cultural heritage for example customary laws. These activities are used to commemorate and hold some memories while installing a sense of understanding and belonging. The elders who said to be protectors of cultural heritage often use their knowledge of certain aspects cultural heritage to solve disputes among people for example the Dare system which is an African court system were matters and decision within a community are solved. Furthermore cultural heritage is also practised through the use of cultural heritage customary laws used when tourist visit heritage which they required to follow. Cultural heritage is passed on from one generation to another and provides a sense of belonging to people but it is dynamic. It is in order to address the necessities of the present generations who depends on their heritage place for day to day survival (Harrison et al 2008). Therefore

heritage comes from a process of using the past in order to meet current demands which supports the idea of protecting it (Harvey 2008).

The idea of heritage was set forth in 1992 when the UNESCO World Heritage Committee (WHC) presented the idea of cultural landscapes to define the environments which include gardens and parks, mountains, lakes, or forests, which exist with divine meaning and show societies' idea of the link between humans, God and nature. According to the Operational principles, the World Heritage Committee pointed out that cultural heritage landscape as cultural properties that are man-made or naturally made. They clarify on the human society evolution and over time settlement, caused by physical challenges and opportunities naturally presented by their environment and of subsequent economic, social and cultural effects (WHC Operational Guidelines, 2008:86). (WHC Operational Guidelines, 2008)

Landscape is defined and categorised as the iconographic ideological, and physical environment (Robertson and Richards 2003). Landscapes do provide a sense of history, continuity and they also provide cultural heritage setting (Taylor and Altenburg 2006). Cultural landscape involves collective memories as their interpretations and meanings. As the interpretations and meanings emerge from the people's whose memories are affected, a heritage landscape can therefore be called a site full of memory, a base with important historical stories and signs to direct, validate and strengthen collective and memory that is personal (Raivo and Attonen 2004).

Cultural landscapes and the physical environment are interconnected thereby present value to local communities in Africa. They are regarded as ruins of past civilizations that were present all over the continent. Technological advancement occurring around the world such as Environmental Impact Assessment have made it possible for the protection of cultural heritage for academic purposes and for passing of history to future African generations.

However, a technological advancement that are occurring around the world do not only include methods that protect cultural heritage but also procedures or processes that lead to the destruction of cultural heritage such as mining and infrastructural developments which make processes like EIA seem to be not effective. Due to these developments harming cultural heritage resulted in the notion of sustainable development being raised which supports development for the benefit of the present generations without affecting the right of the generations to come in meeting their needs (Raworth (2017)).

2.3 Significance of Cultural Heritage and Environmental Impact Assessments.

Apart from Cultural heritage being a non-renewable resource it is regarded as an income generating assets by a number of people in Africa. Cultural heritage also acts as an Identity in which people of a certain group are identified by other societies. Cultural heritage can be regarded as an income generating asset due to its accumulation of both local and foreign currency through tourism. There is need to safeguard cultural heritage because its destruction can mean the destruction of a community's way of life and income generation will be affected. Environmental Impact assessments therefore enables nations to preserve their cultural heritage and use it sustainably.

The role Environmental impact assessment is to analyse and provide solution of the proposed project on the heritage site so that the presumed impacts can be mitigated. An Environmental impact assessment report therefore will involve what is outlined by the law, the consultation procedure, environmental mitigation, baseline and monitoring plans. Mitigation measures aimed to dodge, reduce, and compensate for the anticipated damages of a project that have been proposed on cultural heritage site.

The implementation of Environmental impact assessment will include a number of participants with typical obligations and roles consisting of the project proponents, private consultants, government departments, external reviewers, authorities, local resident's stakeholders and

communities. Stakeholders for cultural heritage site according to Sullivan(2004) are all the groups and individual who have an interest or concern in the interpretation, management and preservation of cultural heritage resources which intern promotes sustainable development.

2.4 The Concept of sustainable development.

The 1972 United Nations conference on the Human Environment in Stockholm presented the idea of sustainable development and this lead to number of nations passing particular Environmental safety laws and assessments. The idea of sustainable development is supported within the environmental impact assessment, that is why Raworth (2017) goes on to say it address current generation's needs without affecting the resources for the benefit of other generations to come.

Sustainable development is an issue that requires contribution of all countries and stakeholders. The concept of sustainable development is what lead the United Nations to develop goals in 2015, whereby a set of 17 sustainable development goals (SDG) are focused on ending poverty, protecting vegetation from projects that harm the environment and ensuring prosperity.

The improvement in sustainable development achieved by Africa over the years comprises of African countries making their way to conserve their natural resources and protect the environment. These developments include Rwanda implementing prohibition on single use of plastics to reduce pollution. It is clear to note that societies in Africa have also managed to develop this theory through the religious and sacred values possessed by many heritage sites.

Heritage sites are Non-renewable unlike other aspects of the environment henceforth sustainability of natural heritage is easily achievable that that of cultural heritage. This explains cases which have been faced in some part of Africa concerning Environmental Impact Assessment which aims to uphold sustainable development.

2.5 Environmental Impact Assessment in African countries.

The Nubia campaign in connection to the building of a Dam in Egypt known as the Aswan Dam from the early nineteen fifties to Sixties, created recognition about the results of big scale improvement development projects on heritage sites(Hassan 2007). Additionally this case gave awareness to a number of countries that the depletion heritage can lead to a loss of world-wide history about humanity and this led to the adoption 1972 UNESCO Convention on the protection of the World Natural and Cultural heritage.

Furthermore, before Dam construction, heritage position evaluation was conducted and a report with the title Equatorial Nile Project (ENP) was posted in 1954. Osman (2002) attributes that the assessment was probably, the first to be conducted in Africa. Environmental awareness rising from this challenge lead to the presentation of the environmental impact assessment first act. American National Environmental Policy Act was made a legal law in the United States of America in the year 1970. According to Hassan (2007) in spite of the effect of the Aswan Dam development in Africa, no environmental law was ordained in the continent until Libya enacted its legislation in 1982. Most of the nation's only had particular laws that dealt with production industries for example fishing, forestry and mining legislations.

2.5.1 Environmental Impact Assessment in Sudan.

Sudan is believed to be imbedded with a number of cultural and natural heritage and also it is considered to be the biggest country in Africa. The Nile River which considered to be the longest river in the African continent is believed to pass through Sudan. Sudan also has cultural heritage with archaeological sites stretching from the time of Kerma up to the present Islamic culture. These periods are regarded to be the foundation of human civilisation in Sudan. Cultural heritage sites from these periods are still present and sites like Jebel-Barkal have been engraved on UNESCO's world heritage sites list. The Ministry of Culture, Youth and Sports through the National Corporation for Antiquities and Museums (NCAM) is responsible for the

safeguarding of these cultural heritage sites. Like majority of the countries in Africa the laws and guidelines used in the protection of natural resources face challenges to provide effective protection of cultural heritage hence it is near to impossible in Sudan. In an effort to meet these challenges Sudan introduced Environmental impact assessment.

In 1978 University of Khartoum, Environmental Studies department brought about a procedure or methods for implementing EIA. EIA conducted without guidelines, specifically lead to the use of the process. The discovery of minerals like oil and development in the form of infrastructural development resulted in the use of EIA to a greater extent in Sudan.

In 2001 the Environmental Protection Act (EPA) was passed and this enabled EIA in Sudan at the same time receiving support from the government. Even with the enactments of the laws, EIA still faces obstacles emanating from the very government which passed the laws. The 2001 Environment Protection Act was not followed by stages required for procedures of institutionalization and no laws have been passed since then. However the case on the Petroleum Wealth Act of 1999, which oversees production, export, exploration, refinery and transportation of oil was better processes. The safeguarding of the Environment in Petroleum Industry guidelines were made public in 2002 and then passed into law in 2005.

The guidelines passed involve an evaluation and EIA preparations in places where the operations of petroleum are conducted. They went on to state that any operations of petroleum decision shall act in accordance with international laws and Sudan is a member state (Ministry of Energy and Mining, 2005). Therefore the significance of this is that best practices and environmental measures will be included in preparation of a contract and implementation of the project.

In Sudan, there are only two locations which have Ministries of environment which include the Red Sea and Khartoum States. Environmental matters in the remaining regions in Sudan

are not really taken seriously and efficiently by the agriculture ministries, irrigation and health. EIA is thereby viewed as another procedure in different ministries that have their attention elsewhere. Heritage is considered EIA significant aspect in Sudan but majority of the countries focus is on natural heritage. Although the country's main focus is not on cultural heritage every EIA conducted on cultural heritage is documented and the impacts that cultural heritage may face.

Due to the implementation of EIA there is need for archaeologist. The purpose of an archaeologist is to record the cultural heritage sites and artefacts on the land to be developed. Archaeologist role is to provide mitigation measure which prevent negative impacts towards cultural heritage. The archaeologist is also expected to outline the sites and group them according to the level of their condition. This information is only useful in producing mitigation measure prior any development.

However, like other countries in Africa information gathered by archaeologist is not useful because usually in some cases the EIA procedure is conducted after the project has already commenced due to delays in the certificate that gives permission to conduct the projects. In situations like these the next step will be to protect the cultural heritage sites.

Projects are usually conducted before an EIA has been conducted due to the delay in the commencement of the project which results in the developer and funding agency which needs a certificate of permission from the EIA authority in the country, to put pressure on the EIA. Time is a huge factor in these operations, as in most cases the developer conduct the project immediately after the EIA report is handed to the authority and a development certificate is issued. However in some cases projects start before to the certificate of the EIA authority has been approved.

The high rate of development in Sudan has currently resulted in a number of projects like the construction of highways and dams being proposed. It is nearly impossible to conserve cultural heritage due to the fact that most of the projects take place in Nile River are well known for their rich cultural heritage. In these situations EIA implementation would not be able to fully provide mitigation measures that could be used in saving cultural heritage. The alternative plan used would be the use of Strategic Environmental Impact Assessment (SEA) which include the EIA extension to plans, programmes and policies. Its coherent is that it consider the effects of a variety of programmes being conducted in the area. The Island of Sai in northern Sudan could be taken as a case in point. It is considered as the most inclusive archaeological unit of Nubia and consist records of the Sudanese history, from prehistory up to the current Islamic period. Apart from the two dams, construction of two roads on the eastern and western banks of the Nile which is the border between Egypt and northern Sudan, central and southern Sudan are also being constructed. However in Sudan SEA has never been applied because of weak legislative framework.

In 1999 the Ordinance for the Protection of Antiquities (OPA) 1999, substituted the Antiquities Protection Act of 1952. Though it states in Chapter II, Article 10.2 under the title development stated that projects may be done after archaeological surveys and studies. The law in charge of the Protection of the Environment in the Sudan Petroleum Industry does not value the safeguarding of cultural heritage during the extraction of oil. However it has pushed for the protection of the environment, adopting a broad definition which involves the total of natural systems and their basic components which include soil, water, flora, air involving socio-cultural systems. On the other hand Section 17 of the EPA 2001, provides guidelines to guide the activities of different implicated stakeholders. Conservation of the touristic and archaeological sites is one of these directives.

The government of Sudan put less value to cultural artefacts dating to the Kushite Meroitic period. Therefore, the role of host community's cultural heritage conservation specifically the tangible heritage is usually not noticeable. Local communities are only interested in tangible heritage when they discover that the monuments are regarded as sacred religious places, for example tombs of holy people. Administrators and law makers should raise awareness amongst the Sudanese people through awareness projects, school pupil's heritage tours and education through the media.

Dupagne and Teller (2003), pointed out that the situation leads to challenges in management on the value assessment processes. In conclusion it can be highlighted that the EPA and the OPA are facing challenges in providing a strong legal support which aid to the protection of cultural heritage in Sudan.

2.5.2 Environmental Impact Assessment in Kenya.

Development and population growth in African countries is being experienced at a faster rate resulting in pressure on both natural and cultural resources. If cultural heritage is not protected the results will involve the environment being affected negatively. The environment must be safeguarded not only the benefit of all humankind but also in order to achieve the sustainability of the ecosystem. Effective methods for assessing possible effects on cultural heritage resources include cultural heritage assessment. Rogers (2008) points that CHIA refers to the possible effects positive and negative on the grand cultural resources lay out of an area, which might also end result from works or proposed improvement or trends of the environment and the design of measures to reduce effects which are unacceptable and increase the beneficial ones.

The laws that cover Impact Assessment of Cultural Heritage in Kenya, provide illustrations of projects employed pre and post the passing of laws on environmental impact assessment. It

should be highlighted that before the legislation framework of CHIA environmental impact assessments was passed it was still being carried out in Kenya.

The National Environmental Management Authority (NEMA) is the institution that organises the Environmental Impact Assessment (EIA) in Kenya recognised beneath the Environmental Management Coordination Act (No. 8 of 1999). Under the Act, EIA is stated to be an organized analysis of plans, policies, programmes to decide their potential environmental effects and the value of such effects and to recommend mitigation of the negative ones (EMCA 2001). This Act is focused with environment or natural issues and does not look at cultural heritage. National Museums and Heritage Act of 2006 cover all cultural heritage issues.

The act orders the National Museums of Kenya (NMK) to carryout Impact Assessments at heritage landscapes before development construction on any land. The aim of NEMA is to coordinate and supervise over issues that have to do with the environment and governments main instruments on environmental policies implementation (EMCA, 1999). It plays a role of supervisory in all EIAs conducted in Kenya. To manage this successfully, NEMA oversees the running of all EIS. The EIA method in Kenya enable decision making all because of the information required to conclude if it's necessary to initiate the project must be implemented. The procedures requires consultation and participation of the communities. EIA findings are reachable to the communities, on the other hand certain sections of the same EMCA state that the report should be confidential whenever there is very critical information.

EMCA obtain EIA guidelines which state the EIA requirements and steps to be followed when conducting an EIA. Most development projects doesn't conduct nor value EIA except the ones funded by multilateral and bilateral international projects conducted by government organizations like the Kenya Generation Company (KenGen), Kenya Lighting and Power Company or Kenya Pipeline Authority. In various cases heritage practitioners are consulted in order to analyse the procedure when the developer encounters heritage resources. Cultural

Heritage Impact Assessment in most cases is conducted in multi-sector developments and the NMK will be included. For example during the building of Loiyangalani Desert Museum in Northern Kenya, an Environmental Impact Assessment was carried out. The NMK was also included in carrying out CHIA during the building process of the Koitalel Samoei. In Lamu, an evaluation of the impacts posed by human settlements and improvements on the sand dunes was directed by NMK and advised developers, construction companies and government officials

The case of the Sondu Miriu hydropower carried out in the province of Nyanza is an example, the project a power plant at the river which makes use of water from the Sondu River and produces yearly generation of electricity (Africa Water Network 1999). The Project now depends on the river flow with a small less storage at the intake since it does not have a dam and connected storage. Part of the Water is diverted to the power station through the tunnel and the rest float downstream into the river.

The law states that an EIA should be carried out before such an undertaking begins due to the extent of the project. EIA was to be conducted in 1991, therefore a means of a socio-economic Impact Assessment in 1993 by using the Japan based company and Kenya's RPS International Company, Kenya Power Company request (KPC, now acknowledged as KenGen). A summary of an EIA that have been completed in September 1993 the results were stated. In 1999 an Archaeological Impact Assessment within place selected for damage by the means of building of a 60MW hydroelectric power plant along the Sondu-Miriu River was also conducted by a group of archaeologists. During the excavation the archaeologists discovered a site wealthy in material culture that includes lithic, faunal and pottery remains (Onjala et.al. 1999). A preliminary test excavation was conducted in February 2000 and it was aimed on deciding the depth and the extent of maintenance of the cultural properties. The material culture founded was then well preserved (Lejju et al 2006). It should be stated that this CHIA research focused

on cases the area would have destroyed by using the hydroelectricity power plant. The focus was not on the surrounding cultural and environmental landscapes therefore the mitigation and effects for the change in the river path was not stated.

The destruction of forests and pastures to pave a way for the construction for tunnels, quarters, staff, offices, roads will disrupt the natural environment. Project should respect the cultural beliefs and heritage of the communities (Odera, 2001). The community pointed out the destruction of religious sacred shrines and argued after that the diversion of the river upstream was causing the demolition of the Wang' Odino falls. According to the community, the falls are sacred to them they are a sign of bad and good luck and is were death or the fortune resides. The community is afraid of the falls therefore chosen adults are permitted to go deep into the forest and at Odino hills to visit the falls. The commencement of the project raised awareness resulting in , the Sondu Miriu Community, raised doubts in about the application of the project, by writing letters to KenGen and the Parliamentary Energy Committee. The complaints passed involving heritage included the fact that the project was not environmentally pleasant. They pointed out that project should sustain the environment and major natural resources like water and forests should not be put at risk because they are a very significant sources of livelihood for the affected. (Otieno. 2001).

Even though Kenya does not have any laws that deal with CHIA in particular, the EMCA and NMHA make an effort control project impacts on heritage. However, several weakness are experienced from both Acts that may disturb their effectiveness like the fact that cultural heritage is not mentioned in the EIA guidelines. NEMA is not allowed to provide EIA reports to the NMK to give input on cultural heritage which then requires NMK to pursue the reports from NEMA. The relationship between preservation of heritage and development remains an issue for heritage practitioners especially a large number of people do not see value the important of heritage in countrywide development. Lack of knowledge on the important

cultural heritage has resulted in the selling of cultural artefacts and the destruction of monuments without acknowledging that these are part of the heritage and the need to preserve and safeguard. Heritage has been viewed as not being a necessity to economic livelihoods and because of that NMK has made it an obligation so that local communities will economically benefit from the site. This will aid in the host communities to see the need to conserve monuments in their area and use CHIA as methods for sustainable resource management.

The purpose of this study is to review the available literature to trace the factors that contributed to the development of EIA. The aim is to investigate whether the implementation of the EIA has managed to serve their purpose in the Kwekwe specifically the globe and Phoenix.

2.5.3 Environmental Impact Assessment in Zimbabwe.

Management of environment refers to the process of protecting and preserving natural resources and ecosystems while also ensuring sustainable development .In Zimbabwe environment have been managed since precolonial states however the method has changed over time. Mukwindidza (2008) categorises the management practice into three different stages which are the precolonial management characterised by traditional management system where and myths, beliefs and taboos plays a major role in environment conservation. Additionally the colonial period management was controlled by the laws that separated the indigenous people from their environment and lastly the post-colonial period which involves improvements of the laws to suit the international conditions.

In Zimbabwe environment was managed by the Natural Resources Act that was first passed in 1941.The act was a law passed by the colonial government of Rhodesia that gave the state control over the natural resources in the country. The act gave the settler government the ability to issue licenses for mining, hunting and fishing and to control the use of land for agriculture and forestry. However the Natural Resources Act of 1941 was enfeebled by a series of events that followed such as the Unilateral Declaration of Independence.

On 11 November 1965 Rhodesia (Zimbabwe) the former British colony in Southern Africa declared its independence unilaterally because the minority government opposed the British governments plans to grant independence to Rhodesia under black majority rule. The UDI resulted in the country being put under sanctions and this had ripple effects on the management of the environment. The UDI also resulted in economic decline whereby the sanctions imposed on Rhodesia had severe impact on its economy ,the country's exports were severely restricted and it struggled to attract foreign investments.

In 1980 after independence the government of Zimbabwe was eager to uplift its economy at any cost which led to projects being conducted without impact assessments being conducted. Impact Assessments like EIA were viewed as a barrier which delayed commencing of projects, of which the country was relying on those projects to uplift its economy. The commencing of project without any impact assessments was causing negative impact to the environment hence the reason why the first EIA regulations of the Environment Management policy (1994) made it intentional to carry out EIA for a project.

In an effort to safeguard the cultural heritage, flora and fauna in 1997 Environmental Management Bill was drafted therefore the Zimbabwe Environmental Management Act of 2002. This also resulted in EIA being compulsory so that no project would occur without an environmental impact assessment. The Act resulted in the formation of Environmental Management Agency (EMA) which advised the Ministry for Environment and Tourism on matters involving the development and management of the environment which included the safeguarding of cultural heritage sites which could act as tourist attraction centres.

EMA is a government department responsible for enforcing the Zimbabwe's EIA law .If in any case a developer assumes development without conducting an EIA, EMA has the authority to halt the projects until proper measures have been taken. There are cases whereby development projects have been stopped at Globe and Phoenix mine following no-observance of the EIA..

Due to the reports made towards Globe and Phoenix it can be assumed that EMA may be experiencing challenges in trying to implement the rules and to monitor development effectively due to lack of support and compliance from other responsible authorities.

According to Nhamo (2003) the Environmental Management Agency objectives is to regulate the procedures of environmental impact assessment, utilisation and management of the environment. According to the environmental management Act Section 2e (b) defines the environment as habitats spatial surroundings, ecosystems, or other constituent parts, natural , modified or man-made, including agricultural areas, urbanized , rural landscapes just to mention a few

In Zimbabwe EIA is includes professionals specialized in different fields create groups of experts from different disciplines to conduct assessments. The need for an interdisciplinary team for Environmental Impact Assessments has the benefit of making sure that impacts of the development on aspects which includes health to human and animal's wellbeing are always considered first. Before a project begins the developer should contract EMA registered consultants to carry out an EIA.

Moreover, there are three stages when conducting an EIA. Desktop survey is the first stage this is when the developer seek advice from the National Museums and Monuments national site register for a list of the known sites in the area to be affected by development. This stage mostly include Archaeological survey unit of the National Museums and Monuments consultation which has more than 16 000 cultural and natural heritage sites in its records. Information on the location, names, condition and current conservation challenges found at the site are contained in its records. Site information can lead one to determine the condition and destiny of sites in the area before the carrying out of any survey. The archaeological survey is the most significant process in carrying out an EIA. Sites listed in the archaeological survey

involve sacred sites, landscapes, historical sites like buildings, archaeological sites, graves and battlefields.

Additionally, stage two in carrying out EIA is field assessment, the physical survey of the site in order to find out and to record important sites or artefacts that were not listed on the archaeological survey list. The survey locates all sites and identifying threats that might be caused by the development. The third stage is the mitigation of threats that may impact the sites recorded in area and this will also require further excavations, surveys and mapping of the most significance sites.

The report of an archaeological impact assessment gives an account of the activities and projects and the similar effects on heritage sites within the projects vicinity. The main topic in the report include the basis about the significance of conducting a heritage impact assessments, and to meet the National Museums and Monuments ACT, the environment statement. The report must include the record and description of all existing heritage sites in the area under development, the effects of the migratory and development measures to safeguard heritage sites. The heritage impact assessment report further suggest mitigation.

The above shows a detailed description of how EIA came to be and how the process makes it possible to protect cultural heritage and to provide additional support.

2.6 Challenges preventing effective Environmental Impact Assessment in Africa.

Industrialisation has made evolution and development unavoidable outcomes among human community which in turn has effects on cultural heritage. Heritage custodians are responsible in the protection of non-renewable resources at the same time upholding the concept of sustainable management. The connection between EIA and sustainable development is what must be made public in order to enlighten people on the importance of environmental assessment processes.

EIA has the possibility to assist heritage institutions which usually have shortage of funds for archaeological work, documentation of cultural heritage which are required when a new site is encountered. If the heritage institutions are to implement EIA, it will not only mitigate effect on cultural heritage but will lead to more opportunities that have unreachable.

A number of countries in Africa often face monetary challenges which are not supported by the government. Shortage of capital results in the inability to carry out archaeological research and conservation because of the expenses incurred which surpass their budgets. Majority of the developments include earth moving projects such as mining and infrastructural developments which place undiscovered cultural heritage in danger of facing possible destruction and this is due to the lack of funding to involve specialist well versed in project implementation assessment. Examples of countries going through monetary challenges include Uganda. National heritage institution lack the necessary equipment required for impact assessment and suffer from lack of manpower. The impact assessment are then carried out by foreign consultancy companies who are not well versed in African cultural heritage.

From the above notion it was made aware that a number of countries have qualified heritage professionals working in national heritage institutions which intern results in the same archaeologist being required to conduct EIA which makes the process less transparent and can lead to corruption in the EIA process.

2.7 Possible solutions for Effective Environmental Impact Assessment.

Developments taking place in Africa such as mining incurred huge negative effects which affect both tangible and intangible cultural heritage resources. Cultural Heritage is also being affected by the decline of archaeologists and heritage managers being produced in African Tertiary education. Not only is Africa experiencing a shortage in skilled personal in the protection of heritage but also lack the financial capacity to employ professionals on the management of heritage resources. African heritage also suffers from lack of private heritage

professional which comprise of archaeologists, architects not within the heritage institutions who are able impact assessments. African heritage institutions have the opportunity to use this weakness and create independent divisions that can carry out EIA.

Further solutions may include heritage organisations might be organizing with the planning authorities and agencies on environmental protection to succeed in development making use of the Environmental Assessment (SEA) approach which includes conducting an EIA before any development takes place.

2.8 Chapter Summary

This chapter aims to view the significance of Environmental Impact Assessments , the steps taken in the EIA, the responsible authorities in the management of cultural heritage, the individuals who evaluate the EIA and lastly to highlight the challenges or gaps encountered by looking at a few sites in Africa. In support of cultural heritage management Munna (2008) attributes that heritage must be preserved at all cost so that future generations can also benefit from it. On the other hand as noted by Needham et al (2009) governments must not be selfish to ignore cultural existence in face of development rather than protecting heritage for posterity. In line with the above statement Muringaniza (2008) attributed that African countries must have a strong legislation framework for the proper preservation and conservation of heritage embracing all tools such as Environmental Impacts Assessments and Archaeological Impact Assessments respectively.

CHAPTER 3

RESEARCH METHODOLOGY AND DESIGN

3.1 INTRODUCTION

The chapter, focused on research methodology. Creswell (2014) defines research methodology as the systematic study of methods and techniques used to conduct research. It provides a clear understanding on how the research was conducted which included the use of a research design. The research design used which is Qualitative in nature included interviews, documentary reviews and observations. A case study was also used which provided an in depth analysis of Globe and Phoenix located in Kwekwe in the Midlands Province in Zimbabwe.

The aim was to use research methods to gather information on whether EIA had been effective in the safeguarding of cultural heritage which enabled the use of qualitative research method. The purpose of Qualitative research method was to it provide a clear explanation of a participant's personal knowledge, experiences and views. Non numerical data collection methods were involved in qualitative research methods which included interviews, observations and documentary review.

The study further made use sampling techniques in an effort to select a representative sample from a larger population. In order to make the selection purposive sampling technique was used. This technique was used due to the fact that it allowed the selection of specific participants which suite the evaluation of the effectiveness of Environmental Impact Assessment.

After the data had been collected there was need to examine the extracted insights so as to come up with a conclusion. Data analysis was deployed, which involved the use of pictures, field observation and comments from informants. The data analysis techniques provided a comprehensive of the collective knowledge.

This chapter is important because it demonstrates the need and validity of the study. It shows that researchers have thought carefully about their approach and have taken steps to ensure that their findings are reliable (Meloy 1994)

3.2 RESEARCH METHODOLOGY

Matthews (2014) states that research methodology as the measures or approaches used to discover, choose, process and analyse material regarding a particular problem. Common research methodologies include quantitative, qualitative, mixed research techniques, case studies, surveys, experiments and action research. In this research, case study research methodology and qualitative research methodology were used. Case study refers to a detailed analysis of case or situation to understand its complications and changes. Qualitative research methodology according to Koerber and McMichael (2013) entails the gathering and interpretations of textual material such as interviews and questionnaires.

Qualitative research method was used because it involves interviews which were used to present an understandable explanation of the respondent's personal knowledge. A Case study was also used due to the fact that it provided a detailed and precise explanation which produced clear understanding of effectiveness EIA in safeguarding cultural heritage at Globe and Phoenix in Kwekwe in the Midlands Province in Zimbabwe.

3.3 RESEARCH DESIGN

According to Leedy (1997) the phrase research design, refers to the study design that lays out the overall structure for data collecting. MacMillan and Schumacher (2001) contends that research design provides a framework for selecting research subjects and settings as well as data collection procedures to answer research questions. Research designs are comprised of survey design, case study design, mixed methods design to mention but a few.

The quality of the findings acquired were supported by research designs employed. The study made use of a case study to evaluate the effectiveness of EIA in safeguarding cultural heritage sites through observations at Globe and Phoenix. Crowie (2011) alludes that a case study approach allows detailed, multi-faceted examination of intricate issues in their truthful settings. The use of a case study was suitable due to the fact that a case study provides an in depth understanding of particular situation in its actual position or scene. A case study made it possible for the study to present the connection between reviewed literature, the assumed situation and the information from the participants. Interviews and questionnaire conducted also enabled the collection of in depth information from the participants. In the study structure interviews, documentary review and observations were conducted which made it possible to acquire only relevant information to study. The research on the effectiveness of Environmental Impact Assessment is more descriptive in nature hence the data collected provided a clear and precise understanding about the effectiveness of EIA in the safeguarding of cultural heritage resources.

3.4 POPULATION AND SAMPLE

Best and Kahn (1993) define a population as any group of individuals that have more characteristics in common that are of interest to the researcher. The term population refers to the respondents who interact with the researcher during fieldwork and have knowledge that is beneficial to the study and can be used to come up with a plausible conclusion. A sample is a subset of the population that is selected for study. The sample should be representative of the population so that any findings can be generalized to the larger group.

The subject must be wisely chosen, well-defined to prevent going off root from the limitation verifying the population required. The population selected included heritage practitioners, city

developers, the Environmental Management Agents and environmental impact assessment consultants. The major reason for selecting this population was that they are the EIA practitioners responsible for the safeguarding of the environment which includes cultural heritage sites. In cases where there are benefits to be derived from these resources the above are the immediate beneficiaries.

3.5 SAMPLING METHODS

McCauley (2001) defines sample as a division of a people that may reasonably mimic the features of the population from which it was drawn. In an effort to carry out a research study involving a number of candidates it is nearly impossible to involve every member in that population.

The purposive sampling method was selected due to the fact that it has its own unique benefits. Purposive sampling can be time saving as this method does not require randomly selecting participants from a larger population and it can produce high quality data as the researcher can select participants who have relevant knowledge or experience related to the research question.

3.5.1 PURPOSIVE SAMPLING

Kelly (2010) states that purposive sampling is used to select respondents that are most likely to yield appropriate and useful information. The authority explains that purposive sampling is a way of identifying and selecting cases that will use limited research resources effectively.

According to Kassiani Nikolopoulou (2022) purposive sampling can also be called judgemental sampling. It is called judgemental because this sampling method relies on the researcher's judgement when identifying and selecting the individuals, cases or events that can provide the best information to achieve the study's objectives. This study used purposive sampling because it produces information which is not biased and also the researcher was able

to select relevant participants with the knowledge and experience concerning EIA and cultural heritage.

Furthermore, Nikolopoulou (2022) states that purposive sampling is best used when concentrating thoroughly on relatively small samples for examples access to a particular subset of the population that shares certain issues likely to have unique cases This notion is supported by the study's focus on the Case of Globe and Phoenix, in Kwekwe, in the Midlands Province of Zimbabwe which required participants in that specific location. The main goal of purposive sampling is to select participants who have specific characteristics or traits that are relevant to the study (Guest, G., Buce, A and Johnson L, 2006). In support of the above notion the main goal of purposive sampling in this study is to identify individuals suited to helping in answering research question and assist in the evaluation of the effects of EIA in safeguarding cultural heritage which include EIA consultants, EMA agents and cultural heritage practitioners.

3.6 DATA COLLECTION

Williams (2011) defines data collection as the methodological gathering and measurement of information on variables of interest in order to answer research questions, test hypotheses, and evaluate outcome.

In this study data was collected through Interviews, documentary review observations. An interview is a conversation between two or more people where one person (the interviewer) asks questions to another person (the interviewee) to gather information or opinions on a particular topic (Oxford learners Dictionaries 2005). Interviews can be structured or unstructured. Structured interviews are conversations in which specific questions occur in a specified order (Jamshed, Shazia 2014). There are also unstructured interviews which are unrestricted and are open exchanges which are not planned. Although there are two different

types of interviews, this research chose to use structured interviews so that the respondent could answer what was intended and provide information vital to the research.

The study also used observation which refer to the act of closely watching or examining something or someone in order to gain information or understanding .It involves using the senses, such as sight hearing ,touch', taste and smell, to gather data about a particular phenomenon or event.

Additionally documentary review also aided in data collection. Documentary review involves a critical analysis of a non-fiction film or video that presents factual information about a particular subject event or person. It involves evaluating the accuracy and credibility of the information presented as well as the effectiveness of the films or videos.

Evaluation of secondary sources was done enabling familiarisation with available literature that deals with the protection of cultural heritage, EIA and sustainable management. , a secondary source is a document or recording that relates or discusses information originally presented elsewhere (University of Carolina 2021).

Additional research concerning sustainable development was carried out with the use of the internet focusing mainly on environmental impact assessment. Texts, newspaper articles and journals which act as secondary sources on cultural heritage and sustainable management were consulted establishing a solid theoretical framework.

3.7 VALIDITY AND RELAIABILITRTY

According to McCraig (2010) validity is defined as the accuracy of a statement about consistency of broad inferences drawn from research findings. The purpose of validity is to make a particular issue clear. The interviews and questionnaires comprised of questions that related to the study's objectives and goals. Validity was achieved through the use of interviews and questionnaires guided by the research objectives and questions.

Reliability is the degree to which an assessment tool produces stable and consistent results over time and across different conditions or contexts, ((Gregory J.Cizek 2012). In this study qualitative research method was used with a small number of participants to reduce bias and to bring forth facts. The The objectives of the study were fully explained to the participants to to prevent surprises or withholding of information.

3.8 DATA PRESENTATION AND ANALYSIS.

Data collected in this study was qualitative in nature. Photographs, acquired information from interviews, documentary review and observations were used to present the finding discovered from the research. Data collected through field surveys, textual material from desktop surveys or internet surfing lead to data matching and content analysis to be conducted. Data matching and content analysis was done in an effort to find connection from the extracted data. All the collected information was interpreted in an understandable manner through the use of photographs and textual material.

3.9 PILOT TESTING.

Hopkins (2002) defines a pilot study as a smaller version of a larger study that is conducted to prepare for that study. Pilot study, involves pre-testing the research tools with a small group of people in the area. Pilot testing was used in this study to remove ambiguities and contradictions found during interviews. Pilot testing allows the analysis of the research with a small group of participants. In this study pilot testing was conducted among the participants from Environmental Management Agency, Environmental Impact Assessment Consultancy and Cultural heritage practitioners from the National Mining Museum.

3.10 ETHICAL CONSIDERATION.

Kaiser (2009) states that ethics of research comprises of factors which are confidentiality, informed consent protection of privacy and protection from harm. The study took into

consideration ethical issues to accommodate both the researcher and the respondent .Every step was taken considerably in the study so as to protect the respondents from any harm that would affect them .In the study participants anonymity was supported by not writing their names on the questionnaires or stating their names in the interviews so as to ensure safety from any threats that could occur.

3.11 SUMMARY

In this chapter the study's focus was on research tools and design. Data was collected through a variety of methods such as interviews, documentary review, observations and the use of a case study. The information acquired in this chapter will be presented and analysed in the following chapter.

CHAPTER 4

DATA PRESENTATION, ANALYSIS AND DISCUSSION.

4.1 INTRODUCTION

In Chapter 3 the focus was on providing an understanding on how the research was conducted. The chapter unveiled the research design, research methods, research tools which involved observations, documentary review and interviews. The quest for gathering data involved the use of research design. The study opted for the Qualitative Research design and used case study and interviews. In this chapter data gathered is presented. The data were collected from the Environmental Management Agencies, Environmental Impact Assessment consultants and Cultural heritage practitioners. In this chapter the study presents data gathered from documentary reviews, recordings from interviews with key informants, and pictures from the observations made at Globe and Phoenix.

4.2 DATA PRESENTATION.

In this section data presented were gathered from observations, documentary review and interviews. Data presentation is the process of displaying and organising data in a way that is easily understandable and visually appealing (Investopedia, 2021). This can include the use of charts, graphs, tables hence in this section the study presents data that were gathered from the Environmental Management Agency, heritage practitioners and Environmental Impact Assessment consultants and observation from Globe and Phoenix. The data were gathered with the use of research tools such as interviews, documentary reviews and recordings. The research tools were guided by the research questions and field observation of the case study which is Globe and Phoenix. Our data presentation begins with views from the Environmental Management Agency, followed by Environmental Impact Assessment consultants and lastly Heritage practitioner.

4.2.1 Views from the Environmental Management Agency

In this section we present data gathered as the respondent answered the questions that were asked by the researcher. Responses are captured question by question.

1. How long has EMA had offices in the City of Kwekwe?

It was established in the year 2017 which makes it 6 years from now.

2. As an institution do you have a clear understanding of cultural heritage?

Cultural heritage is part of the values and traditions of a nation which was handed down by our ancestors and it is the responsibility of the custodians to maintain its values to pass it to future generations. It is our culture which separates us from other nations as it gives us a sense of identity, guides our livelihoods, our daily decisions as a nation and it acts as our moral guide.

3. Do you see any need to protect heritage?

There is need to protect heritage because it is derived from the objectives of EMA which strives to establish and maintain a reliable and easily accessible environmental information system and improved decision making. It was mentioned that EMA in the Kwekwe district was aware of the impacts of development on the cultural heritage.

4. Has there been a situation where development was stopped because an EIA report had not been produced?

The agency encounters many cases where EIAs have been ignored and there was a case in Munyathi in the Kwekwe District where a mining project was being conducted but the site had graves. The project had to be stopped due to the disapproval of the local villagers who had their loved ones buried at site and it was discovered that no EIA report had been produced. If the project had continued the graves were to be exhumed.

5. Have you ever encountered developers who wanted to by-pass the EIA process?

Majority of developers attempt to by-pass the Environmental Impact Assessment. Several developers commence their projects without EIA certificates. EIA certificates give developers permissions to go ahead with their project after the site has been thoroughly vetted. Absence of a certificate results in issuing of a ticket as a form of a fine or punishment measure to stop the developer's operations until they have gone through the proper channels. Furthermore, there are developers who end up in court due to lack of compliance after being issued with a fine.

6. What are the problems that your institution faces in making sure that the regulations of EMA Act are adhered too?

The constitution faces issues in compliancy from developers who initiate their projects without a certificate. Lack of a certificate leads to illegal production which in turn results in negative impact towards the environment. The impact is nearly impossible to rectify as compared to setting strategies to mitigate the negative impacts before the projects have been initiated. There are also challenges in lack of support from the other government departments who are part of the protection of the environment such as the Zimbabwean Republican Police (ZRP). There are issues of delaying of information between the departments whereby information is received at EMA weeks or months after a project has commenced. Delay in submitting information becomes a challenge due to the rise of in negative effects towards the environment that could have been reduced.

In some cases when a report is made to the ZRP, submission of information to EMA takes long. It is submitted lately due to their own obligations resulting in the commencement of illegal projects on the environment resulting the discovery of collapsed sites.

Other challenges include lack of funding. It is complicated to anticipate the level of damage or pollution that may be encountered at any given period hence the funding or budgets may not

be enough. The national budgets are based on previous EIAs but because of the development encountered due to the introduction of technology the impacts differ from before.

The consultancy companies are responsible for EIA and EMA deals with reviewing the EIAs so as to check if all the EIA steps have been implement.

4.2.2 Views from Heritage Practitioners.

1. For how long have you been involved in EIA?

The Heritage practitioner had not participated in any Environmental impact assessments but had participated in Archaeological Impact assessment which is a component of EIA. The AIA is responsible for assessing all the archaeological resources. Archaeological Impact assessment deals with assessing whether developmental projects will have any negative impact on cultural heritage resources within the area.

There is a list of guidelines which were followed upon assessment. It is now mandatory that no development is done without environmental, cultural and archaeological assessment however, even with those guidelines distraction of precious cultural heritage is still being noticed.

2. How many EIA have you participated in? State them.

The heritage practitioner participated in a number of AIA which included Renin housing project where 25 graves were encountered that were exhumed to pave way for housing project and also in lower Gweru where exploration of oil was intended. The site is located near Insukamini monument which is one of the monuments under central region made of drystone walls. The area of research encompasses the monument and an assessment was done on how the project was going to impact the monument because a lot of drilling was going to be done and use of huge machinery hence there was need to ensure mitigation measures in order to uphold sustainable development.

3. *What were your positions or responsibility?*

A survey had been conducted in Tokwe mukosi which was part of an EIA to assess the flooding that had taken place and there was need for an archaeologist. The flooding occurred in 2014.

4. *In those EIAs that you participated in was there anything that was felt to be of cultural heritage importance such that the course of the project was altered?*

Flooding that took place in Tokwe mukosi resulted in the distraction of a lot of resources, property and documentation of all heritage resources that were in the area. More than 30 rock art sites, drystone walls, graves were covered by water. The purpose of the documentation was due to the fact that all the resource were now underwater and now Tokwe mukosi is now the biggest inland dam in Zimbabwe , but there is now an archive of the heritage resources.

Consultation was done after random people or developers had realised something of cultural importance at Insukamini, and Tokwe Mukosi.

5. *Have you ever negotiated with the developer to sponsor the analysis of cultural heritage resources recovered?*

Negotiations with developers have not been done yet.

6. *What guides you in carrying out EIA?*

There is the Natural Resources act 25:11 which regulates what needs to done in AIA and EIA and there is also an handbook structured by the NMMZ specifically for EIA, which provides guidelines on what needs to be done during an EIA.

4.2.3 Views from Environmental Consultancy Company.

1. *How many projects has your company conducted so far?*

The number of projects the company has undertaken include 100 projects with other companies and 15 within his own company also more than 30 projects inclusive.

2. What is your understanding of cultural heritage?

Heritage has been created by humankind and it is both tangible and intangible and is reflected in people's significance of the past. It is reflected in objects, artefacts, and ethnographic objects as well as in different places which people use as shrines or homesteads of the ancestors.

3. Do you think it is important to protect heritage?

It is important to protect heritage because, protecting heritage is protecting legacy, identity and protecting people's values. Cultural heritage is what make us human beings and what it means to be alive hence the connection between culture, heritage, spirit and the people.

4. How do you come to know areas in need of EIA?

All developers are guided by the EMA Act chapter 20; 27 so for a developer to conduct a project without an EIA would be a crime. For an EIA to be conducted the developers are the ones who notify EIA consultants so as to conduct an EIA. Public consultation is also used whereby you use the views of the local people in terms of what they think about the proposed project.

5. What challenges have you encountered during the projects?

After an EIA has been conducted the developer may ignore the recommendations and continue to cause destruction due to their need to maximise their project. For the developers to consider the importance of cultural heritage it becomes a barrier to their objective. The developers continue with their project which will be a risk to the environment and cultural resources at a large. A way of overcoming such actions is to use legal means by using reporting such cases to EMA. In other cases, they face disputes from the locals who do not want their environment tempered with because of religious purpose. These challenges especially the lack of compliance becomes a threat towards cultural heritage sites as we notice development project taking place illegally without an EIA.

4.2.4 Results from the field observations

A survey was conducted around Globe and Phoenix specifically the Globe and Phoenix primary school. The objective was to analyse whether there were any positive changes towards the site so as to compare to the previous reports and observations made before. In previous years Globe and Phoenix primary was under siege from illegal gold panners digging within the premise (HANYANI NEWS 2022). Globe and Phoenix is believed to be in a gold rich area which attracts illegal miners. The illegal miners were even digging pits inside classrooms and there are trenches running underneath classrooms blocks. The activities were usually conducted during the night. It was discovered that the mining shafts were not affecting the school alone, but it was believed that the infrastructure located near the globe and phoenix was on top of several shafts.



Figure1: Figure showing the type pits dug at Globe and Phoenix Primary School and at other areas around Globe and phoenix.



Figure 2: The image presents the tunnels underneath the globe and phoenix area inclusive of the EMA offices (The Chronicle 2022).

4.3 DATA ANALYSIS AND DISCUSSION OF FINDINGS.

Mining and infrastructural developments have made it nearly impossible to safeguard cultural heritage. Due to the ongoing mining and infrastructural developments, cultural heritage is at risk like never before thus it is important that pre-development assessments in the form of Environmental Impact Assessment are implemented. Focusing on the case study of Globe and Phoenix there is need for the implementation of EIA to protect cultural heritage located in that area.

4.3.1 Cultural heritage and its Importance.

The results gathered from two interviewees who are Respondent A (an EMA officer) and Respondent B (an EIA principal consultant) indicate that the two understood what cultural heritage meant and the importance of protecting it. The responses provided by the Respondent A and Respondent B intimated that, Cultural heritage is part of the values and traditions of a nation which was handed down by our ancestors and it is the responsibility of the custodians to maintain its values to pass it to future generations. It is our culture which separates us from other nations as it gives us a sense of identity, guides our lively hoods, our daily decisions as a nation and it acts as our moral guide.

Additionally Respondent B stated that Cultural heritage has been created by human kind and it is both tangible and intangible reflecting the significance of our past. It is reflected in objects, artefacts, and ethnographic objects as well as in different places which people use as shrines or homesteads of the ancestors. Respondent B also stated that it is important to protect heritage because, protecting heritage is protecting legacy, identity and protecting people's values. According to Respondent B Cultural heritage is what make us human beings and what it means to be alive hence the connection between culture, heritage, spirit and the people.

From the responses gathered from the interviews, the respondents appeared to have a clear understanding of what cultural heritage was and the need to protect it .The respondents' notion of protecting cultural heritage for the future generations is also supported by the concept of sustainable development which according to Raworth (2017) aims at meeting the needs of the present as well as those of the future generations. Harvey (2008) also states that heritage results from a process of using the past in order to meet current needs which matches the idea given by the Respondent A and Respondent B.

Respondent A also highlighted that protecting heritage is what drives the institution's objectives which are to establish and maintain a reliable and easily accessible environmental information system and improved decision making. The objectives are guided by EMAs mandate which is to promote sustainable environmental management and use of natural resource in Zimbabwe.

However, EMAs objectives appeared to be contradicting with the ongoing environmental violation taking place at Globe and Phoenix. The HANYANI NEWS published an article bemoaning Mining and infrastructural development taking place in the City of Kwekwe which culminated in the destruction of cultural heritage sites (HANYANI NEWS 9 November 2022). Observations made at the Globe and Phoenix Primary School, where gold panners were digging pits in the school premises in search of gold raises questions regarding the dilemma faced by EMA . Below is pictorial evidence of what the research found out



Figure1: Figure showing the type pits dug at Globe and Phoenix Primary School and at other areas around Globe and phoenix.

4.4 Implementation and Effectiveness of Environmental Impact Assessment

The findings indicated that the implementation and the effectiveness of EIA were facing numerous challenges resulting in EIA performing at minimum capacity. The challenges presented are supported by the Respondent A and Respondent B who acknowledged that the implementation and effectiveness of EIA was encountering obstacles. In support of their view Respondent A stated that the Agency encounters many cases where EIAs have been ignored. The respondent cited a case in Munyathi in the Kwekwe District where a mining project was being conducted but the site had graves. The project had to be stopped due to the outcry and disapproval of the local villagers who had their loved ones buried at site. It turned out that no EIA report could be produced. If the project had continued the graves would have been mutilated or exhumed.

Furthermore Respondent A stated that a majority of developers attempt to by-pass the Environmental Impact Assessment processes. Several developers commence their projects without EIA certificates. EIA certificates give developers permission to go ahead with their project after the site has been thoroughly vetted. By law absence of a certificate attracts a fine. This kind of punishment is expected to be measure to stop the developer's operations until they have gone through the proper channels. In terms of the law EIA is fully instituted, however it appears there are leakages at the enforcement level. Furthermore, there are developers who end up in court due to lack of compliance after being issued with a fine. EMA and EIA consultancy companies faces issues in compliancy from developers who initiate their projects without a certificate. Lack of a certificate leads to illegal mining or infrastructure development which in turn results in negative impact towards the environment.

Realising that EMA has to rely on support from other government departments such as the Zimbabwean Republican Police (ZRP) to carry out its mandate, the jigsaw becomes even more complicated. There are issues of delays experienced between the departments whereby

information is received at EMA weeks or months after a project has commenced. Delay in submitting information becomes a challenge as this may result in human errors resulting from issues of unethical nature such as corruption, forgery and many other ills.

In some cases when a report is made to the ZRP, submission of information to EMA takes long. The ZRP may not prioritise the case against a murder case for example, however this may leave developers not viewing EIA with the seriousness it deserves. It should also be made known that ZRP is not the final destination in enforcing compliancy to EMA policies, there is the legal arm to institute penalties, so the stakeholders are many. This creates a red tape scenario. Developers are likely to eventually grow weary and find alternative ways that may be detrimental to EIA and the protection of cultural heritage.

Respondent A also pointed another challenge related to lack of funding for EMA to carry out their mandate. A typical example of where EMA is constricted is in enforcing penalties to people who start veld fires, Respondent A argued. It is complicated to anticipate the level of damage or pollution that may be encountered at any given period hence the funding or budgets may not be enough. The national budgets are based on previous EIAs but because of the development encountered due to the introduction of technology the impacts differ from before.

Respondent B stated after an EIA has been conducted the developer may ignore the recommendations and continue with development due to the need to maximise their project time. When one analyses Respondent B's views he seems to regard issues of safeguarding cultural heritage as secondary when compared to the need to construct a mall for example which presents a paradox. For the developers to consider the importance of cultural heritage it becomes a barrier to their objective. The developers continue with their project at the expense of the environment and cultural resources. These challenges especially the lack of compliance become a threat towards. Non-compliance to EIA and the other challenges advanced above become a hindrance to safeguarding of cultural heritage sites.

The findings indicate that EIA can be effective to some extent if provided with strategic planning. The ignorance of developers towards the implementation of EIA has been an ongoing situation which seems to have escalated. The compliance of EIA is supported by the case at Globe and Phoenix where mining activity was banned due to the absence of an EIA report (HERALD NEWSPAPER 15 March 2007).

The challenges also highlighted by respondents A and B involving compliance issues among the government department also prove that EIA is effective however it faces challenges which take time to mitigate. The issue of compliance cannot be justified by the ZRP meeting their obligations as stated by respondent A. Violation of the environment through unauthorised production is part and parcel of the ZRP responsibilities. This issue of compliance raises an assumption that, there is a possibility that the ZRP officers might not be aware that they are also responsible in the protection of cultural heritage. The lack of knowledge of the ZRP is supported by the HANYANI NEWS (2022) where complaints were made by local people at Globe and Phoenix of illegal gold panning. When the Agents at EMA were questioned if they were aware of such reports they denied it.

The implementation and the effectiveness of EIA faces challenges due to obstacles encountered while trying to enforce EMA policies and the contradiction between serving the current generation or safeguarding cultural heritage sites for future generations (UNESCO 2003).

4.4.1 Guidelines used in the protection of cultural heritage

In an effort to have successful implementation of EIA, there are a set of guidelines followed. These guidelines are meant to direct developers in the proper procedures to follow. The guidelines were mentioned in the results produced from the interviews with the respondents. Respondent B stated that all developers are guided by the EMA Act chapter 20; 27 so for a developer to conduct a project without an EIA would be a crime. For an EIA to be conducted the developers are the ones who notify EIA consultants. Public consultation is also used

whereby you use the views of the local people in terms of what they think about the proposed project.

The same notion was also supported by Respondent C, a Heritage practitioner. Respondent C confirmed that there is the Natural Resources Act 25:11 which regulates what needs to be done in Archaeological Impact Assessment (AIA) and EIA and there is also a handbook structured by the NMMZ specifically for EIA, which provides guidelines on what needs to be done during an EIA. From the findings it was evident that the respondents were aware of that all EIA implementations were guided by a set of guidelines. The guidelines stated by respondent C are supported by the NMMZ Act 25;11 Section 4 (25) of the Act which states that, “no one should alter any cultural heritage without the permission of NMMZ”. The Act recognizes that monuments and relics are non-renewable hence the need for their protection. In most cases when developers abide to the rules and regulations they follow the guidelines which require them to notify the EIA consultants of their projects so as to conduct an EIA for them. However, when the respondent was asked to state the guidelines the question was quickly dismissed, raising a burning desire to know whether they knew these guidelines they mentioned or were not fully aware of the guidelines by mind so as to state them. The same scenario also occurred with Respondent C when asked what guided them during EIAs. The Respondent C mentioned that there was a handbook which provides guidelines on what needs to be done during the EIA but could not state the guidelines. The respondents responses have resulted in the assumption that they may be suffering from knowledge deficiency. It can also be mentioned that there is a possibility of the respondents having knowledge deficiency when it comes to the guidelines because the guidelines are usually meant for the developers hence they might not see the need to cram them.

4.5 SUMMARY

The chapter presented research findings beginning with biographical data of the respondents followed by raw data presentation and finally analysis and discussion of the research findings. The discussion made it clear that implementation of EIA is not operating at its full capacity hence making it ineffective in the protection of cultural heritage. From the findings of the research evidence to support the above notion was extracted which shows the need to enhance EIA. EIA is facing challenges which need immediate attention to enable the protection of cultural heritage sites at Globe and Phoenix.

CHAPTER 5

SUMMARY, CONCLUSION, RECOMMENDATIONS AND AREAS FOR FURTHER RESEARCH.

5.1 INTRODUCTION.

The previous chapter's objective were to present data collected, analyse the collected data and to provide a discussion of the findings .This chapter, being the last chapter focuses on providing a summary of the findings so as to come up with a plausible conclusion .This final chapter will also present recommendations and areas for further research as informed by the research findings.

5.2 Summary.

Modern development in the form of mining and infrastructural development has resulted in going destruction of cultural heritage sites. The study aimed at evaluating the effectiveness of Environmental Impact Assessment towards safeguarding cultural heritage site.

The focus of the first chapter was on the background of the study, purpose of the research, the statement of the problem, research objectives, research questions, and assumptions of the study, significance of the study, delimitations, limitations and the definition of key terms.

The second chapter's focus was on the review the available related literature to trace how EIA has been implemented before and how effective it has been in the protection of cultural heritage. It also involved the definition and explanation of cultural heritage, its significance as well as the importance of Environmental Impact Assessment. The concept of sustainable development which is upheld within the EIA was discussed. Examples of how EIA has been implemented in some parts of Africa were given. This chapters objective were to view the significance of Environmental Impact Assessments , the steps taken in the EIA, the responsible authorities in the management of cultural heritage, the individuals who evaluate the EIA and

lastly to highlight the challenges or gaps encountered by looking at a few sites in Africa. The chapter also aimed to investigate whether the implementation of EIA has managed to serve their purpose in Zimbabwe using the case study of Globe and Phoenix in the City of Kwekwe of the Midlands Province in Zimbabwe.

The third chapter provided a clear understanding on how the research was conducted starting with the choice of a research design. A case study was used which provided an in depth analysis of Globe and Phoenix located in Kwekwe in the Midlands Province in Zimbabwe. The research methods used included interviews, documentary review and observations. The research tools used were guided by the research question.

The study further made use of sampling techniques to select a representative sample from a larger population. The research used purposive sampling techniques were used. These techniques were used because they allowed the selection of specific participants which suite the evaluation of the effectiveness of Environmental Impact Assessment.

After the data was collected there was need to examine the extracted insights so as to come up with a conclusion. Data analysis were deployed, which involved the use of pictures, field observation and comments from informants. This chapter demonstrates the need and validity of the study. The information acquired in this chapter was presented and analysed in the chapter that followed following specified themes.

In the fourth chapter data gathered were presented demonstrating necessity and rationality of the study. The data were collected from the Environmental Management Agencies, Environmental Impact Assessment consultants and Cultural heritage practitioners. In this chapter the study presented data gathered from documentary reviews, recordings from interviews with key informants, and observations made at Globe and Phoenix. From the findings of the research, there was evidence to show that there is need to enhance EIA since

EIA implementation has been facing challenges thereby compromising its effectiveness forth protection of cultural heritage sites at Globe and Phoenix.

A conclusion was provided on findings in support existing theories and explanation to justify the similarities and recommendations towards the improvement of the delinquent that lead to the research.

5.3 Conclusions.

The findings generated enabled possible conclusions to be drawn supported by the existing theories from the study. The significance of cultural heritage and the sole purpose of protecting it which is supported by the concept of sustainable management was highlighted. However the situation at Globe and phoenix led to a conclusion indicating that the responsible authorities are fully aware that cultural heritage is a non-renewable resource and needs to be protected but the authorities continuously encounter challenges which deter them from achieving effective implementation of EIA. The implementation of EIA is considered as a development barrier by several developers. These developers who are focused on increasing their profits and reducing their expenses view makes EIA as an obstacles. Some developers are by-passing EIA because of financial reasons and as well as the turnaround time it takes to get the EIA certificates. The reason for not complying with EIA requirements are numerous and diverse. They include but are not limited to delay in project implementation, expenses involved, corruption, and loopholes in the implementation of statutes. Another reason could be due to knowledge deficiency on the importance of cultural heritage sites, the global economic value for safeguarding the sites as well as greedy on the part of the developers. The developers are guided by certain guidelines provided by EMA. Their inability to comply with the process of EIA may be due to lack of awareness about the importance of cultural heritage sites. It is therefore necessary to mount campaigns to sensitise professionals and educate the public alike.

Although EIA is being implemented, it seems to be less effective in the safeguarding of cultural heritage as portrayed by ongoing developments of gold panning place at Globe and Phoenix which has attracted public outcry. The reasons for non-compliance to EIA may stretch beyond the scope and purview of this research. EIA being conducted are ineffective due to the methods that are used to identify areas in need of EIA. These include the use of reports from the local people and developers who seek EIA. This shows that if reports have not been made and developers have not requested for an EIA there will be no assessment made towards the environment which works against the principles of sustainable development.

Cultural heritage is regarded as an important aspect to people's livelihoods and also to a nation's growth hence there is need to protect it. In an effort to protect cultural heritage there are several guidelines provided which must be followed so that the challenges met are attended to. It appears that institutions charged with the responsibility to protect cultural heritage might be shying away from doing their mandate for reasons undisclosed to this researcher. This could be a sensitive issue especially when we consider the physical degradation and defacing of Globe and Phoenix as a cultural heritage sites.

In an effort to discover how effective EIA is in safeguarding cultural heritage it was discovered that not only EIA consultancies are involved in the protection of cultural heritage but a variety of sectors within the government. Some of the authorities involved in EIA include the EMA, ZRP and the NMMZ. The different sectors work hand in hand all in an effort to meet one goal which is to protect cultural heritage. However the authorities listed are affected by the lack of compliancy among themselves which remains a nagging issues affecting cultural heritage..

In conclusion it is plausible to regard the effectiveness of EIA to a greater extent however due to the problems which are faced by the responsible authorities it becomes ineffective. Some of the problems being faced have been occurring since independence 1980 because of the

countries need to provide for its people. However, the need for development in the form of mining and infrastructure development has led to continuous distraction of cultural heritage which now seems like a tradition which the developers have adopted. The problems posed can be rectified provided that the government takes necessary measures to accomplish the objective.

5.4 Recommendations

Based on the research findings the study proposes the following recommendations to improve the efficiency of EIA towards safeguarding cultural heritage. EIA experiences weakness in its sector towards locating sites in need of EIAs, it is therefore recommended that EIA legislation be reviewed so as to provide a set of new methods to locate areas in need of EIA. Locating methods should be formulated to support scenarios where developers do not request for an EIA and when local people do not report of illegal development.

The EMA should provide awareness campaigns and educational programmes to the public unpacking the role of citizens as custodians of cultural heritage. It is evident that the existing legal frameworks in some situations are silent on the negative impacts caused by development projects on heritage resources. It is recommended that effective law enforcement should be extremely strict to ensure compliance to EIA and safeguarding of cultural heritage. Emphasis on the importance of cultural heritage should also be made because it is a non-renewable resource. Involvement of the local community can aid the protection strategies. This will increase its protection and community engagement since they will be aware of how important cultural heritage is.

It is also recommended that inter- governmental departments involved in the protection of the environment improve their support by removing red tape syndrome for effective protection of

cultural heritage. All existing projects without any proper certification should be discontinued and fined for non-compliance.

5.5 Areas of Further research.

The study was focused on evaluating the effectiveness of EIA in safeguarding cultural heritage sites. However judging from the data that were collected it showed that there are also other authorities responsible for the protection of cultural heritage such as the Zimbabwe Republican Police, the Environmental Management Agency and the National Museums and Monuments of Zimbabwe. Investigating or evaluating the effectiveness of the responsible authorities in the protection of cultural heritage may also be helpful in the protection of cultural of cultural heritage.

To add more the evaluation of other methods of protecting and providing mitigation measures such as Archaeological Impact Assessment can also be evaluated. The sole purpose of evaluating AIA is to produce a probable explanation as to why cultural heritage is still facing continuous destruction.

The research unveiled that legislation is usually not the main concern but the implementation as well as the practice of EIA. The consultation of Heritage practitioners is not usually required which results in their inability to monitor the EIA process. There is need for Heritage Impact Assessment to be involved therefore the NMMZ should inform the environmental bodies. They should also take initiative in the monitoring of EIA during the project cycle. EIA decision making should also involve NMMZ to safeguard cultural heritage sites.

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APPENDIX A

My name is **Tamutenda Gwengwe**, a student at Bindura University of Science Education pursuing a Bachelor of Science Honours Degree in Culture and Heritage Studies. As part of

the requirements of my studies I am conducting a research project entitled, **Effectiveness of Environmental Impact Assessment in safeguarding cultural heritage sites: Case study of Globe and Phoenix**. May you kindly assist by responding to the interview questions attached below? The interviews are designed for the purpose of collecting data for academic purposes only. The information collected shall remain confidential and Anonymous.

SECTION A: DEMOGRAPHIC INFORMATION

Kindly tick the appropriate box for your answer.

1. Gender Male Female
2. Age: 26-34 35-44 45-54 55-64
3. Qualifications: Degree Master's Degree Doctor of Philosophy
4. Experience: 5-10years 10-15 15-20 20-25
5. Indicate your organisation

SECTION B: Environmental Management Agency.

1. How long has EMA had offices in the City of Kwekwe?

.....
2. As an institution do you have a clear understanding of cultural heritage?

.....
3. Do you see any need to protect heritage?

.....
4. Has there been a situation where development was stopped because an EIA report had not been produced?

.....
5. Have you ever encountered developers who wanted to by -pass the EIA process?

.....
6. What are the problems that your institution faces in making sure that the regulations of EMA Act are adhered too?

.....
Thank you for taking time to respond to my questions.

Tamutenda Gwengwe

Mobile Number: +263 778 775 766

Email: tamutendag@gmail.com

APPENDIX B

My name is **Tamutenda Gwengwe**, a student at Bindura University of Science Education studying a Bachelor of Science Honours Degree in Culture and Heritage Studies. As part of the

requirements of my studies I am conducting a research project entitled, **Effectiveness of Environmental Impact Assessment in safeguarding cultural heritage sites: Case study of Globe and Phoenix**. May you kindly assist by responding to the interview questions attached below? The interviews are designed for the purpose of collecting data for academic purposes only. The information collected shall remain confidential and Anonymous.

SECTION A: DEMOGRAPHIC INFORMATION

Kindly tick the appropriate box for your answer.

- 1. Gender Female Male
- 2. Age: 35-44 26-34 55-64 45-54
- 3. Qualifications: Degree Master's Degree Doctor of Philosophy
- 4. Experience: 5-10years 10-15 15-20 20-25
- 5. Indicate your organisation

SECTION B: Environmental Impact Assessment Consultancy.

- 1. How many projects has your company done so far?
.....
- 2. What is your understanding of cultural heritage?
.....

3. Do you think it is important to protect heritage?

.....

4. How do you come to know areas in need of EIA?

.....

5 What challenges have you encountered during the projects?

.....

Thank you for taking time to respond to my questions.

Tamutenda Gwengwe

Mobile Number: +263 778 775 766

Email: tamutendag@gmail.com

APPENDIX C

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SOCIAL SCIENCES AND HUMANITIES

My name is **Tamutenda Gwengwe**, a student at Bindura University of Science Education pursuing a Bachelor of Science Honours Degree in Culture and Heritage Studies. As part of the requirements of my studies I am carrying out a research project entitled, **Effectiveness of Environmental Impact Assessment in safeguarding cultural heritage sites: Case study of Globe and Phoenix**. May you kindly assist by responding to the interview questions attached below? The interviews are designed for the purpose of collecting data for academic purposes only. The information collected shall remain confidential and Anonymous.

SECTION A: DEMOGRAPHIC INFORMATION

Kindly tick the appropriate box for your answer.

- 1. Gender Male Female
- 2. Age: 26-34 35-44 45-54 55-64
- 3. Qualifications: Degree Master's Degree Doctor of Philosophy
- 4. Experience: 5-10years 10-15 15-20 20-25
- 5. Indicate your organisation

SECTION B: CULTURAL HERITGE PRACTITIONERS.

- 1. For how long have you been involved in EIA?
.....

2. How many EIAs have you participated in? State them.

.....

3. What were your positions or responsibility?

.....

4. In those EIAs that you participated in was there anything that was felt to be of cultural heritage importance such that the course of the project was altered?

.....

5. Have you ever negotiated with the developer to sponsor the analysis of cultural heritage resources recovered?

.....

6. To what extent are the developers willing to sponsor?

.....

7. What guides you in carrying out EIA?

.....

Thank you for taking time to respond to my questions.

Tamutenda Gwengwe

Mobile Number: +263 778 775 766

Email: tamutendag@gmail.com

APPENDIX D

FACULTY OF SOCIAL SCIENCES & HUMANITIES
DEPARTMENT OF LANGUAGES AND COMMUNICATION SKILLS

P. Bag 1020
BINDURA, Zimbabwe

Tel: 263 - 71 - 7531-6, 7621-4

Fax: 263 - 71 - 7534



BINDURA UNIVERSITY OF SCIENCE EDUCATION

Date: _____

TO WHOM IT MAY CONCERN

RE: REQUEST TO UNDERTAKE RESEARCH PROJECT IN YOUR ORGANISATION

This serves to introduce the bearer, Tamutanda Cwengwe Student Registration Number B192658B, who is a BSc CULTURE AND HERITAGE STUDIES student at Bindura University of Science Education and is carrying out a research project in your area/institution.

May you please assist the student to access data relevant to the study, and where possible, conduct interviews as part of a data collection process.

Yours faithfully

MR I. MADZIKO
ACTING CHAIRPERSON - LANGUAGES AND COMMUNICATION SKILLS

