BINDURA UNIVERSITY OF SCIENCE EDUCATION FACULTY OF SOCIAL SCIENCES AND HUMANITIES DEPARTMENT OF LANGUAGES AND COMMUNICATION SKILLS

HERITAGE VERSUS DEVELOPMENT A CASE STUDY OF JUMBO ANCIENT MINE IN MAZOWE

 \mathbf{BY}

ZVIKOMBORERO MAWANGO (B192924B)

A DISSERTATION SUBMITTED TO THE DEPARTMENT OF LANGUAGE AND
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SUPERVISOR: DR M. RUNZONZA

BINDURA, ZIMBABWE

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Approval Form

I certify that I have supervised Zvikomborero Mawango for this research titled: Heritage Vs Development as a case study of Jumbo Ancient Mine in Mazowe. The research is in partial

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Permanent Home Address:

House Number 6971

Zimre Park

Harare

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DEDICATION

To God and my family (especially my father and mother).

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ABSTRACT

The aim of the study was to examine the views of the community surrounding Jumbo mine in line with development and heritage issue in the area. The objectives guiding the study includes to investigate how communities living around the site benefit from the use of the site as well as identifying threats that affect the heritage site. Also, to assess the extent to which National Museums and Monuments of Zimbabwe, are able to protect the archaeological sites from negative exploitation and to examine the ways that can be used to protect the local heritage sites in line with sustainable development. The study was influenced by the sustainability theory. Qualitative research approach was used with 12 participants. The findings of the study established that the Jumbo ancient mine benefits the communities through employment creation, circulation of local currencies as well as standing as a cultural significance of the people. Threats such as land degradation, corruption, lack of proper management as well as compromise of security by artisanal miners were noted as major issues compromising the sustainability of the site. The NMMZ played a major role in working collaboratively with police and government but to no avail. Measures suggested include providing more security forcescommunity engagement and education programs creation and enforcement of policies for regulation. Therefore, the study recommended that the government must draft policies that preserve the heritage sites as well as revising the existing policies and communities educating the younger generations so that they can also learn to appreciate and value of the site. Lastly greater outreach and education efforts are needed to increase community involvement and awareness

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ABBREVIATIONS

- NMMZ National Museums and Monuments of Zimbabwe
- UNESCO United Nation Organization for Education, Science and Culture
- JAM Jumbo Ancient Mine
- HD Heritage Vs Development
- SDHM Sustainable Development and Heritage Manage

INTRODUCTION: BACKGROUND OF THE STUDY

INTRODUCTION

The nexus between heritage and sustainable development has been explored in different context and setting. With the world being guided by sustainable development goals, heritage management, conservation, preservation and restoration has adopted the concept of sustainable development. It is within such context that this study seeks to discuss the nexus between heritage and sustainable development using Jumbo Ancient Mine as a case study. The chapter provides a background to the study, outline objectives and research question. Further it provides a delimitation of the study.

1.1 Background of the study

Over the last several decades, in an era of holistic and integrative thinking for sustainable development, researchers and policymakers started to perceive heritage as a tool for sustainable development, (Dümcke and Gnedovsky, 2013). Critics view the utilization as a risk to heritage since it leads to marketing, exploitation, and annihilation. The concept that heritage has economic worth and that heritage preservation happens when heritage pieces are actually used, producing cash to fund preservation, is gaining traction globally (Welch 2014). Furthermore, others argue that many, if not most, of the advantages received from heritage are realized only during practical usage. Heritage usage advocates include not just economics and sociologists, but also many people who have historically opposed the notion, such as archaeologists.

Heritage is valued by people today and was also appreciated by previous generations as it covers historic buildings or monuments as well as natural landscapes (UNESCO, 2013). Current and previous studies on heritage have come to a consensus on the link between heritage and sustainable development. This is because heritage has the potential to contribute to the socio-economic development of communities at the same time with political influence on the trajectories of a

nation. According to Chipangura (2017), heritage is the selective production of materials and non-material artifacts which can be documented, conserved and preserved within discourses of knowledge of power. Also heritage is a social, economic and cultural resource. In addition, it is the physical representation of a community's identity that demands to be passed on to others (Riganti and Nijkamb 2004).

Conserving heritage sites means managing the site for the benefit of the current and the future generations (Riganti 2004). While a site is to be preserved for the benefits it provides to local employment as a result of heritage tourism. Apart from this, heritage places play a vital role in the intelligent use of natural resources which generate to the communities surrounding a heritage place. In addition, heritage sites in Africa offer a unique opportunity for community's empowerment through integrated rural development and it also has potential to mobilize resources for heritage tourism (Eboreime 2009:14). According to UNESCO's World Heritage Convention (1972) communities must benefit from their site within their locality.

Despite the noted benefits of heritage to communities and nation at large there is a marked evidence of the destruction of sites. Heritage sites located in mining regions or areas are vulnerable to illegal artisanal mining activities. Graves as part of cultural heritage have been destroyed, natural vegetation cleared for firewood and building materials of temporary shelter for miners and wild animals hunted down to provide food or displaced from their natural habitats (Phiri, 2011). Economic activities such as agriculture and poaching are also threatening natural heritage. Use of chemicals like cyanide by poachers has resulted in the killing of many animals in various sanctuaries locally and internationally. In 2015 as reported by the Zimbabwe Wildlife Management Authority (ZWMA) a total of 23 elephants were killed through poisoning. Since the inception of

the land reform at the turn of the millennium, there has been episodes of destroying natural heritage such as indigenous trees and animals in former white occupied farms. People were moved from areas, consequently severing physical connections heritage to heritage landmarks. Such people do not have any knowledge on the significance of heritage (Chipunza, 2021).

The research probes in to accessing whether or not the communities surrounding Jumbo Ancient Mine are developing from the existence of heritage sites around or not. While development means to meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland Report 1987). Development can also refer to a process that creates growth, physical, economic, environmental, social and demographic components. The purpose of development is to raise the level and quality of life of the population, and the creation of expansion of local, regional income and employment opportunities (Pearson 1992). Heritage can be used to stimulate development. Apart from this, by using heritage sites as a source of income generations, communities can also benefit from the heritage places. In addition, human development strategies that destroy heritage sites rather than conserve them enrich their values and ethnic heritage. Heritage sites are most likely to continuously suffer during the developing process.

The study recognizes that heritage tourism makes communities benefit. Heritage is an important foundation for development, both now and in the future. In addition, heritage sites in Africa offer a unique opportunity for community's empowerment and it also has potential to mobilize resources for heritage tourism (Eboreime, 2009:14). Heritage mobilized resources will benefit the community and according to (UNESCO's World Heritage Convention of 1972), communities must benefit from their site with their locality. Jumbo ancient mine is a national monument little known whether the communities surrounding Jumbo mine are benefiting economically and non-

economically from development use the areas heritage. Therefore, it is the crux of this study to provide an introspection into how the site is utilized for development purposes in and around the site and its ability to be expanded so as to increase the nation's Gross Domestic Product.

1.2 Statement of the Problem

Heritage is perceived as a beneficial inheritance from past generations that is maintained in the contemporary societies and bestowed for the benefit of future generations (UNESCO, 2003). Despite the recognition of heritage as a benefit to future generation, there are sites that are being neglected and destroyed compromising the sustainability of heritage in Zimbabwe. Reports have established that illegal mining activities are going on at vital Jumbo Ancient mine in Mazowe which disintegrate the mine's integrity making preservation difficult. It has become difficult to preserve the site as a result of lack of funding which then leads to its deterioration. This raises eyebrows when it comes to its preservation comparing it with other ancient sites in Zimbabwe in as much as little has been documented about the benefits of the existence of such as site. This points to the issue of sustainability in line with the National Development Strategy 1 on investment in mining. It is then the crux of this study to cover the gap in knowledge in relation to the heritage site and the benefits in development of the site itself as well as the communities around. The study shall establish the major factors contributing to its demise as well as panaceas to the problems so as to preserve the site for future generations in line with sustainable development.

1.3 Aims of Study

1. To examine the views of the community surrounding Jumbo mine in line with development and heritage issue in the area.

1.4 Objectives

- 1. To investigate how communities living around the site benefit from the use of the site.
- 2. To evaluate threats affecting Jumbo heritage site.
- 3. To assess the extent to which National Museums and Monuments of Zimbabwe are able to protect the archaeological sites from negative exploitation.
- 4. To distinguish the ways that can be used to protect the local heritage sites in line with sustainable development.

1.5 Research Questions

- 1. To what extent are the local communities at Jumbo ancient mine involved in the use of the heritage tourism to their benefit?
- 2. What are the threats to heritage site around the Jumbo Ancient Mine?
- 3. What are the contributions of the National Museums and Monuments of Zimbabwe in heritage management at the Jumbo Ancient Mine?
- 4. What are the methods being used by the community at Jumbo mine to protect local heritage sites?

1.6 Significance of the Study

The study is instrumental in adding value in the management, conservation and protection of heritage sites at community and institutional level. Since there is dearth of information in relation to the positive outcomes of the site, it is imperative to document the relationship between heritage and development. It benefits the following:

Communities

It facilitates development of mechanisms that help in identifying and managing heritage sites within their local areas. Further it advances the need to develop strategies for training and transfer of skills in heritage management from generation to generation.

Individuals

Many people benefit in understanding the importance of heritage at family, community and national level that require preservation for the benefit of the future and upcoming generations.

Policy makers

The study adds value to the research field that seek to inform policy makers to develop policies that are aligned to the needs of each specific community in relationship to its heritage.

Institutions

Institutions charged with teaching, training, guiding management and restoration of heritage sites benefits immensely in developing ways of assisting communities to manage heritage sites within their jurisdiction. This creates close relationships between communities and institutions such as the National Museums and Monuments of Zimbabwe (NMMZ).

1.7 Delimitation of the Study

The study and its findings are based on the research conducted at Jumbo Ancient Mine and therefore the outcome are only applicable to the case study. It also focuses on the roles of communities in heritage management but also recognises them as potential threat to local heritage.

1.8 Limitations of the Study

The study is limited due to informants who were afraid to participate as they feared for their privacy. This is despite the researcher making explicit explanation on the intention and purpose of the study. Furthermore, some of the participants could not participate due to family and work commitments which affected the interviews and responses to questions.

1.9 Definition of key terms

Heritage

It is the full range of our inherited traditions, monuments, objects and culture. Most important, it is the range of contemporary activities, meanings and behaviours that we draw from them.

(www.umass.edu/chc/about/whatis heritage.html)

Development

Is the process that creates growth, progress, positive change or the addition of physical, economic, environmental, social and demographic components (SID, 2021)

Sustainable development

Is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs (IISD, 2022).

1.10 Proposed chapter outline

The study is organized in chapters as defined by the purpose of each.

Chapter 1 provides a detailed background to the study highlighting the nexus between heritage and development. It further focus on the challenges that communities faces in managing heritage.

In addition, it defines the statement of the problem, objectives research question and explains the delimitation and limitations of the study.

Chapter 2 offer an in depth review of existing literature on the heritage and development with emphasis on sustainable development. Attention is directed toward benefits of heritage, threats to heritage and discusses the theoretical concept of sustainable development within the context of heritage management.

Chapter 3 provides the research methodology of the research by asserting the research design which is the case study. It also outlines the data gathering techniques such as interviews, questionnaires and observations. In addition, it offers discussion of the data analysis procedures including the sample size and nature of the informants.

Chapter 4 provide a detailed discussion of the findings as guided by the research questions. The findings are discussed in line with other researches.

Chapter 5 offers a summary of the research and outlining of the results and closes by making recommendations.

1.11 Chapter Summary

The chapter provided an introduction and background to the study in relation to heritage vs development. It also provides a problem statement, justification as well as research aim and objectives. Definition of key terms as well as the organization of the dissertation.

CHAPTER 2: LITERATURE REVIEW THEORICAL FRAMEWORK

2.0 Introduction

The chapter reviews related literature on the study, "Heritage Vs Development: A Case Study of Jumbo Ancient Mine". The related literature looks at the relationship between heritage and development which is interrogated in the chapter. Therefore, in this section, a review of the concept of heritage, sustainable development, benefits and threats to heritage is undertaken as to find the gaps the study fills. The conceptual framework is based on the linkages between heritage and development is informed by the sustainable development theory which is discussed with emphasis on the relationship on the topic.

2.1 Conceptualisation of heritage

Winwarter (2015) believes that heritage refers to something inherited and passed down from one generation to the next. This can include historic buildings, monuments, or natural landscapes. Chipangura (2017) argues that heritage is a selective creation of physical and non-physical artifacts that can be documented, preserved, and conserved in the context of power and knowledge. Giblin (2014) offers a more suitable definition of heritage as a socially contextualized cultural process that involves the use of the past in the present. Additionally, heritage has social, economic, and cultural value (Winwarter, 2015) and serves as a physical representation of a community's identity that deserves to be shared with others (Riganti and Nijkamb, 2004). Conserving heritage sites involves managing them for the benefit of current and future generations (Riganti, 2004:2) and supporting the local economy by promoting heritage tourism (Abraham, Sommerhalder, and Abe,

2010). Furthermore, heritage sites play an essential role in the sustainable use of natural resources that benefit the surrounding communities.

2.2 Benefits of Heritage to local communities

Various studies have focused on the benefits accrued by communities living in heritage sites. The accrued benefits include employment, tourism, preservation and conservation of the environment and maintenance of biodiversity. These benefits can be categorised as socio-economic, environmental and cultural.

2.2.1 Socio-Economic Benefits

In recent decades, there has been an increasing focus on heritage, and significant changes in perspectives have emerged globally, particularly in recognizing its role in economic and social life. A report titled "The Lazarus Effect," released in 2006, examines the economics of heritage development in Ontario, Canada, and highlights a thriving business in heritage preservation, providing evidence that it can be economically beneficial for communities (Shipley et al., 2006). The sustainability strategy of Western Australia similarly acknowledges that heritage conservation is interconnected with economic development, tourism, urban liveability, waste reduction, and social cohesion (Government of Western Australia, 2003: 211). As a result, heritage is regarded as both a driver and an impetus for socio-economic development, as it is recognized as a potent economic and social resource for communities. The World Bank (1998: 15) identifies heritage as a "development asset" that can stimulate local-level development by creating employment opportunities, generating income, revitalizing urban and rural areas, preserving the environment, and reinforcing social capital.

According to Cernera (2019), a new development paradigm has been outlined by the World Bank and UNESCO, which highlights the importance of economic development within the social and cultural context of the Middle East and North Africa region. This paradigm emphasizes the region's unique history and culture and the cultivation of a strong identity rooted in this uniqueness while being open to the world. Investment projects in the cultural heritage sectors have already been developed in various areas in Jordan, Lebanon, Morocco, Tunisia, and other regions, which are expected to have significant economic and social impacts. Additionally, heritage sites, such as the Lake Malawi National Park World Heritage Site, have become sources of livelihood for communities. Mawere, Mubaya, and Sagiya (2013) also note that heritage sites have become a significant source of income for both rural and urban communities, particularly in developing countries such as those in Africa.

According to Chivore (2021), people living in rural areas benefit from heritage sites and are employed in industries related to their extraction. Artisanal mining, mainly for gold, is carried out in abandoned mining areas, such as Jumbo Mine, which creates economic opportunities for local communities. Macheka (2016) notes that tourism, which brings in foreign currency and creates employment, provides benefits to local communities around Great Zimbabwe. In fact, Macheka (2016) discovered that 58% of the workforce at Great Zimbabwe is recruited locally within a 20-kilometre radius and there is income generation through souvenir buying by tourists, expenditure on local transport and accommodation. Heritage sites also create business opportunities, such as the craft centre created by the community of Nemamwa, as noted in Macheka's (2016) study. As a result, there is an overall improvement in livelihoods through poverty reduction and skills development. Mudzengi, Chapungu, and Chiutsi (2018) support the idea that touring heritage sites, such as Khami Ruins, Victoria Falls, and Great Zimbabwe, can create economic value for local

communities. Musengezi et al., (2018) suggest that pro-poor tourism aims to improve the opportunities and earnings of socio-economically disadvantaged communities.

The existing research on the socio-economic benefits of heritage at Jumbo Mine in Mazowe, Zimbabwe is limited. While there has been some research conducted on the site's history and cultural importance, there is a dearth of research that explores the potential social and economic advantages that heritage tourism could bring to Jumbo Mine. One potential research gap is the investigation of the viability of heritage tourism at Jumbo Mine and the potential economic and social benefits it could bring. This could entail an evaluation of the site's current condition, including accessibility, infrastructure, and cultural significance, as well as a study of the economic advantages of promoting heritage tourism in the region. There is a need for further research into the potential socio-economic benefits of heritage at Jumbo Mine in Mazowe, Zimbabwe, as well as the challenges and opportunities that such heritage tourism could bring to the region.

2.2.2 Environmental Benefits

The heritage mining sites in Europe and Asia have numerous environmental benefits to their local communities. They provide opportunities for ecotourism, promote environmental education, and preserve biodiversity (Holtorf, 2015). Additionally, the restoration and reuse of mining sites can contribute to sustainable urban development, according to (UNESCO, 2011). For instance, the mining heritage site of Rammelsberg in Germany was transformed into a UNESCO World Heritage Site for its cultural, historical, and scientific value. The site has been restored and developed as a museum that educates visitors about sustainability and mining conservation. The area around the mining site has also been reforested, which has helped to preserve the local biodiversity (Kohler & Strauss, 2019). Another example is the Tsumeb Mine in Namibia, which

has been developed as a tourist attraction. The site has been conserved and transformed into a museum and an ecotourism destination that educates visitors about the mining heritage and local biodiversity. The preservation of the mine and the surrounding area has also helped to improve the local economy and promote sustainable development (Koens, Postma, & Papp, 2018).

Preserving and maintaining heritage sites have a range of benefits for the environment. Many heritage sites are set amid natural surroundings, such as forests, lakes, or mountains. By preserving these sites, countries maintain their natural beauty and protect the habitats of local wildlife. According to Azzopardi et al., (2023) African heritage sites can be seen as tourism hotspots, so by promoting sustainable tourism in these areas, it is possible to encourage economic growth with minimal environmental impact in line with the sustainable development. Tanzania's Usambara and Uluguru Mountains, for example, feature dense forest cover that helps with carbon sequestration (Melubo,Lovelock, 2019). By raising awareness of environmental issues, heritage sites help promote conservation efforts, educate people about environmental challenges, and encourage them to take action to protect the planet. Heritage sites can provide an excellent platform for environmental education, allowing people to learn about sustainability, biodiversity, and conservation of natural resources. Overall, heritage sites play an essential role in promoting environmental awareness and sustainability, while preserving natural, cultural, and historical heritage.

Diverse heritage sites in Zimbabwe are built using locally sourced materials such as stone, wood, and clay and this means that preserving these sites can help to protect these resources from depletion. Environmental maintenance encourages a preservation culture which increase public knowledge of the significance of the tourism site and attraction as this encourages locals and

tourists to be conscious of their influence on the natural and built environments. The Khami Ruins in Zimbabwe are constructed on a slope, and there are natural springs and streams nearby. The protection and maintenance of these water resources are ensured through the preservation of the site and the surrounding ecosystem. This therefore promotes tourism as well as increasing health benefits to people within the environment as well as wildlife.

Moreover, mining at Connemara Gold Mine in Zimbabwe is perceived as having a negative impact on the environment and rural livelihoods in the neighbouring villages. While it is recognized that mining is a tremendously profitable company and one of the key drivers of the Zimbabwean economy, it is contended that the majority of the advantages of mining are enjoyed outside the communities (Magidi and Hlungwani, P.M., 2022). Mining sites usually are detrimental to the maintenance of the environment in as much as they promote its disintegration and a threat to the well-being of the people. Such is the case on the impact of illegal mining activities in Kwekwe where 18 pupils from Globe and Phoenix Primary School where injured as the classroom collapsed into an illegal mining shaft. Therefore, heritage sites that produce minerals are detrimental to the environment compared to buildings and other resources. Jumbo mine is also not spared by this environmental degradation which is a risk to the living conditions of people around as it is located in an area with gold deposit and attracts a lot of artisanal miners who use improper methods and dangerous chemicals to the environment (IUCN, 2014). This poses a question on the sustainability of the heritage site in relation to development as it brings forth negative results to the environment.

2.2.3 Cultural Benefits

The cultural benefits of heritage sites in Germany are well documented. According to Petzet and Lipp (2019), heritage sites have a key role to play in the preservation of cultural heritage. They

argue that "heritage sites in Germany have contributed to the nation's cultural identity and have been a major source of pride" (Petzet and Lipp, 2019, p.1). Moreover, heritage sites in Germany have helped to promote cultural tourism, which has had economic benefits for the country. In China, heritage sites have also played an important role in promoting cultural tourism. According to Zhang and Fu, heritage sites in China have helped to promote the country's national identity and have been a source of cultural pride. They argue that "the preservation of heritage sites in China has helped to promote a sense of national identity and cultural pride" (Zhang and Fu, 2018, p.89).

Moreover, heritage sites in China have also had economic benefits, generating revenue from tourism. In Spain, heritage sites have had both cultural and economic benefits. Moreover, heritage sites promote sustainable tourism development, generating economic benefits while preserving the cultural and natural heritage of the local communities. Heritage tourism can provide employment opportunities, particularly in rural areas, and can support the conservation and restoration of heritage sites. In this way, cultural heritage tourism can help to promote sustainable development, as recognized in the United Nations' Sustainable Development Goals (SDGs), including Goal 8 (Decent Work and Economic Growth) and Goal 11 (Sustainable Cities and Communities).

According to Nyirongo and Caltran (2014), heritage sites in Zambia such as the Victoria Falls, the Kasanka National Park, and the Chongwe River gorge, have significant cultural benefits. These sites attract tourists from different parts of the world, generating revenue for the country. This revenue can help support the preservation of the sites themselves as well as other cultural heritage sites in the country. The authors also note that such sites provide a platform for showcasing Zambia's culture, values, and traditions to the world, promoting cultural exchange and fostering national pride. In Ghana, heritage sites such as the Cape Coast Castle, the Elmina Castle, and the

Nzulezo Stilt Village have also been identified as significant cultural assets. According to Agyeman, Appah and Oduro-Kwarteng (2014), these sites have played important roles in promoting Ghana's cultural identity, fostering national unity, and promoting cross-cultural exchange. These sites contribute to sustainable development as they generate revenue through tourism, and create job opportunities not only for the individuals employed at the sites but also for those involved in the tourism and hospitality industries

Heritage sites are important to local communities and beyond. Macheka (2016) notes that the communities claimed that they derive their identity from the sites because it reflects on the achievement of their ancestors. Thus is based on the notion that communities are responsible for creating heritage in the form of settlement, graves and cultural norms that can or may distinguish them from others. Holtorf (2011) articulates that cultural heritage can also provide opportunities for communities to care for something fragile together and hence promote a sense of responsibility, persistence and respect for the knowledge and values of fellow residents or citizens.

Macheka (2016) further highlights the religious significance of heritage sites to the local communities. She asserts that, "the existence of the traditional village and access by traditional leaders to perform rituals is a clear testimony of the resuscitation of the cultural activities". Local communities like those found in Ancient sites such as Great Zimbabwe have religious attachment to their localised heritage such as graves, artefacts and mountains. Holtorf (2011) is of the view that heritage can foster social justice and social cohesion without drawing either on distinctive collective identities or even on the past. This is based on the notion of shared beliefs and cultural practices (Holtorf, 2011). Therefore, the study also articulates on these ideas with reference to the communities within and around Jumbo Ancient Mine heritage site.

2.3 Sustainable Development and Heritage Management

According to a study by Azevedo and Mello (2018), the Brazilian government has implemented several policies to promote sustainable development and heritage management. For example, the National Plan for Cultural Heritage (PNPC) was established to preserve cultural heritage while promoting economic and social development. Additionally, the Brazilian government has implemented the Green Infrastructure Program (Programa de Infraestrutura Verde) to protect biodiversity and preserve ecological services. In Latin America, the Inter-American Development Bank (IDB) has spearheaded sustainable development initiatives in several countries. According to a report by IDB (2020), the institution has funded projects that promote sustainable development by taking into account social and environmental concerns. A case example of this is the Sustainable Tourism Program in Cabo Verde, which aimed to develop green tourism by promoting local culture and ecotourism. Therefore, sustainable development and heritage management play a critical role in preserving cultural and natural resources in Brazil and Latin American countries In Kenya, sustainable development and heritage management are closely intertwined, and there have been efforts to incorporate them into national policies. For instance, the National Heritage and Conservation Commission, established in 2013, is responsible for the management and protection of the country's cultural, natural, and historical heritage resources. According to Mwania and Rambo (2019), the commission has made significant progress in promoting sustainable tourism by working with local communities to develop cultural tourism products that showcase the country's unique heritage. Similarly, in Malawi, there have been concerted efforts to integrate sustainable development and heritage management into national policies. The country has several unique cultural and natural heritage sites that are potential sources of sustainable livelihoods for communities. However, these sites face numerous challenges such as degradation and unregulated

development (Mbendera et al., 2018). To address these challenges, the Malawi government has developed the National Policy on Culture, which aims to promote sustainable development by utilizing cultural and heritage resources.

Sustainable development and heritage management are linked in several ways. First, heritage resources are often the basis for sustainable economic activities such as tourism, crafts, and cultural festivals. These activities can provide livelihoods for communities while preserving their cultural and natural heritage. Second, sustainable development requires the preservation and management of natural resources, which are often linked to cultural heritage. For instance, community forests and sacred sites are often managed using traditional knowledge systems that are crucial for sustainable natural resource management (Wambugu et al., 2020).

Heritage management is an essential aspect of sustainable development as it involves the protection, conservation, and wise use of natural and cultural resources for the benefit of present and future generations. In Zimbabwe, sustainable development and heritage management have been taken seriously by the government and other stakeholders. Zimbabwe's National Culture Policy (2007) recognizes the importance of heritage conservation and the management of the country's rich cultural and natural resources. The policy aims to promote the sustainable use of the country's cultural and natural resources for socio-economic development while ensuring the protection and preservation of these resources for future generations. One example of Zimbabwe's commitment to sustainable development and heritage management is the Matobo Hills Cultural Landscape. The Matobo Hills are a UNESCO World Heritage Site that encompasses a vast area of rocky outcrops and wooded valleys in southern Zimbabwe. The site is recognized for its unique cultural and historical importance, as well as its rich biodiversity.

The Zimbabwean government has implemented various initiatives to promote sustainable development and heritage management in the Matobo Hills. For instance, the Matobo Conservation Society, a non-governmental organization, works with local communities to promote sustainable practices such as organic farming and eco-tourism. The society also collaborates with local authorities to implement conservation programs, including habitat restoration, invasive species removal, and wildlife protection. Furthermore, the Matobo Hills Cultural Centre, which was established by the National Museums and Monuments of Zimbabwe, promotes the conservation and sustainable use of the site's cultural resources. The centre provides educational programs to local communities to increase awareness of the importance of cultural heritage and promote its sustainable use.

2.4 Threats to Heritage Sites

Due to concerns over the increasing number of cultural and mixed sites facing threats from development projects, and a lack of quantitative data on the trend, ICOMOS conducted a study in 2005 titled 'Threats to World Heritage Sites 1994-2004'. The study confirmed that development threats, including deterioration from human or natural sources, demographic growth, and uncontrolled commercial or agricultural development, had been on the rise, particularly in Europe and North America. Cerra et al. (2018) also noted that the extraction of natural resources such as oil, gas, water, and timber posed a threat to heritage preservation. They further stated that large-scale development projects, unsustainable tourism, and general management deficiencies, often due to lack of resources and clarity in property definition, were threats to heritage preservation. Weaknesses in socio-economic and governance systems, lack of trained personnel, and failure to apply relevant legal measures for heritage protection could also lead to threats, such as unlawful operations in African heritage sites.

Management deficiencies and aggressive development pose the two major threats to Africa, particularly sub-Saharan Africa as a whole. Aplin (2017) reported that almost all properties in Africa, about 95%, are affected by management issues, a lack of conservation, threats to authenticity, and environmental pressure. This has resulted in many factors that endanger the heritage sites due to socio-economic activities within these regions. Zambia's nomination dossier (2018) revealed that population growth, mining activities by artisanal miners, and agriculture were among the factors affecting the Mongu site. With regard to mining activities, the landscape has been divided into exploration blocks for oil and gas, leading to land degradation from artisanal mining, as reported by Chivore (2021). Grazing land, farming land, and settled areas have been adversely affected by artisanal mining, with open-cast mining methods leaving the pits uncovered and unprotected during and after abandonment. The depletion of natural vegetation, soil erosion, and the use of chemicals also pose other threats that contaminate water bodies.

Phiri (2011) investigated the ecological risks caused by artisanal mining operations in Umzingwane District. He found that these activities, due to their primitive nature, are associated with inadequate environmental management practices and hazardous safety conditions. The author acknowledged that as the scope of these mining operations broadens, environmental damage worsens. Additionally, the inadequate resources allocated to Zimbabwe's environmental regulatory agencies hinders their ability to effectively monitor and regulate the situation. This study informs current research on threats to heritage in Mazowe and explores opportunities for community engagement in heritage preservation and conservation.

Phiri (2011) stresses the hazards of utilizing chemicals in regions where small scale mining is carried out. The investigation highlights the use of chemicals such as mercury and cyanide in the

gold refining process, posing threats to both the environment and communities. The study was conducted in a small scale mining activity setting and consequently, is not immune to the effects of chemicals on inheritance. According to Donkor et al (2006:3), mercury is harmful to both humans and aquatic food chains. Chivore (2021) further argues that mercury is constantly employed in gold amalgamation, and it is not done in a professional or expert manner. Dreschler (2006) asserts that the primary toxic substance resulting from small scale mining is due to the miners' incorrect handling of mercury. He further argues that almost 78% of all water bodies in small scale mining regions are polluted with mercury.

Human actions pose a threat to the heritage of various communities. Phiri (2011) states that regions containing valuable resources like gold and minerals are susceptible to deforestation, which leads to a loss of biodiversity. Forests provide local miners and communities with building materials and energy, making their destruction even more problematic. Moreover, artisanal miners are known for their nomadic tendencies, further exacerbating the problem. In addition, mining involves the excavation of pits, which places heritage sites like graves at risk and damages archaeological evidence. While natural disasters and armed conflicts are also threats, research by Machat, Petzet, and Ziesemer (2014) indicates that most of the damage to heritage is due to human activity stemming from various sources like social inequality, wealth disparities, and misguided urban development.

According to Tavingeyi (2013), instead of preserving the Musimbira heritage site, local residents are causing harm to it for their own short-term gains. The locals have stolen the fence that marked off the area and repurposed it for their farms and animal traps. The mining operations at the Jumbo ancient mine pose a significant threat to the site's cultural and natural heritage, leading to

intentional destruction. Due to limited information regarding the Jumbo mine heritage site, it is crucial to comprehend the perspectives of community members on heritage and sustainable development.

2.5 Role of NMMZ in Heritage Management

National Monuments and Museums of Zimbabwe play an essential role in heritage management. In Zimbabwe, National Monuments and Museums are crucial in preserving and promoting the country's rich cultural and historical heritage. These sites and facilities serve as venues for showcasing Zimbabwe's art, history, and cultural diversity. According to Ndlovu-Gatsheni (2015), National Monuments and museums are critical in preserving Zimbabwe's cultural heritage. These facilities serve as a means of protecting the country's cultural artifacts, ensuring their longevity, and preserving their historical significance. The national monuments and museums act as custodians of Zimbabwe's rich cultural and historical heritage. Furthermore, the national monuments and museums in Zimbabwe serve as educational tools to teach visitors about the country's history, culture, and traditions. These facilities provide an opportunity for tourists and locals to learn about Zimbabwe's history and engage in cultural tourism.

According to Willis (2014), the museums and monuments in Zimbabwe offer visitors a unique opportunity to experience the country's rich cultural heritage, which is a significant draw for many tourists. In addition to preserving Zimbabwe's heritage, national monuments and museums also contribute significantly to the country's economy. These facilities attract tourists, both foreign and local, who spend money in the country's hotels, restaurants, and other businesses. According to Muvhuti and Musengi (2019), the museums and monuments in Zimbabwe generate significant revenue for the country's economy and have the potential to contribute more to the country's

development. Therefore, national monuments and museums play a vital role in heritage management in Zimbabwe. These facilities serve as custodians of the country's cultural heritage, provide educational opportunities for visitors, and contribute significantly to the country's economy. As Zimbabwe continues to evolve, national monuments and museums will remain critical in the preservation and promotion of the country's rich cultural and historical heritage.

2.5.1 Community Heritage Management

Preserving and managing heritage sites is crucial, and communities living around these sites can play an important role in this process. Tavingeyi (2013) emphasizes that community participation is an effective approach to ensure proper conservation and management of heritage sites. To achieve this, communities need to be educated on what constitutes heritage through campaigns and heritage-managed systems that involve the community. However, Thondhlana and Machiridza (2020) caution that colonial systems excluded local communities from managing their heritage, and this historical context must be acknowledged. Despite the rich cultural and natural resources in Zambia, the country remains one of the poorest nations globally. The Western Province in Zambia is the country's poorest province, even though it is endowed with significant cultural heritage resources. Therefore, there is a need to conserve and preserve these resources in line with the 1972 World Heritage Convention, while also promoting socio-economic development as a government goal.

Tavingeyi (2013) notes that there are various methods employed by local communities to preserve heritage sites, including taboos, narratives of mysterious happenings, and the influence of local leaders. However, these measures have not been entirely effective in preventing encroachment into these sites for purposes such as grazing, farming, and firewood. Mawere et al. (2013) recognize

the efforts of the National Museums and Monuments of Zimbabwe (NMMZ) in community empowerment, but argue that the institution has failed due to operational challenges, insufficient community education, and the adoption of Western approaches, leading to disengagement from heritage site management. Alternatively, Sagiya et al. (2013) propose the adoption of the Adopt a Site program, which seeks to involve local communities in heritage site management, preservation, and presentation. However, the initiative failed due to economic challenges and a failure to engage all community members. Mubaya et al. (2013) suggest a more inclusive approach that engages all community members and systems. Therefore, a case study of the Jumbo Mine community is necessary to understand the collective views of the community on heritage preservation.

2.6 Theoretical Framework: Sustainable Theory

Sustainable Development theory is an interdisciplinary approach that is used by development practitioners and heritage managers to ensure that natural resources meet current needs and those of the future generations (Connelly & Smith, 1999). The concept of sustainable development was first introduced in the 1980s in response to concerns about the consequences of economic development on the natural environment. The sustainability idea underpins sustainable development and the ability of a system to function indefinitely is referred to as its sustainability. It is a state in which the desirability does not deteriorate with time, and the assets that human beings, systems, other biological species, and ecosystems require to function well do not deteriorate. Sustainable development is also a collection of acts motivated by the sustainability ideology. Strategies, policies, programs, and activities are examined, monitored, and evaluated on a regular basis in this sort of development and changed in terms with sustainability standards (Crowther Seifi, Moyeen, 2018). These protections are implemented carefully and intentionally for the betterment of the community and to conserve natural resources.

The aim of the sustainable development theory is to guarantee that future generations can enjoy the same or better opportunities as the present generation, while also preserving the natural environment and ensuring that future generations can meet their own needs. It is a comprehensive approach that seeks to address the needs of individuals, the planet, and economic growth equally. Sustainable development maintains and protects human life-supporting systems, as well as other animals and ecosystems, while balancing developmental needs with environmental standards. In heritage studies, sustainability theory focuses on the use of both tangible and intangible heritage as an economic resource while emphasizing conservation and preservation. Sustainability theory is particularly relevant to rural residents who closely rely on and interact with ecosystem processes that support populations on a global, regional, and local level. People living in rural areas are frequently dependent on resource-based social environmental systems based on agriculture, mining, forestry, energy, or fisheries. The sustainability theory is based on this idea.

Borrowing from the ideas of the sustainability, the study sought to investigate how communities select what to preserve and how to preserve it. Furthermore, to understand the reason or importance attached to the element of heritage to be preserved to measure the extent in of sustainability in relationship to choice and selection process. Thus, this study shall also establish the applicability of this theory in relation to development by focusing on one of the ancient heritage sites which is jumbo mine and examine the extent to which the practices at the site may be beneficial to the present generations as well as maintained for future generations.

2.5 Conclusion

The chapter provided an overview of the existing literature on heritage management, benefits and linkages with the concept of sustainable development. This exposed the benefits that communities

and nations accumulate from heritage sites and its proper management. Furthermore, it articulated on the role of heritage in sustainable development as well as discuss.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

The previous chapter delved into the relevant literature on the phenomenon under study. This chapter however, goes on to provide an in-depth and clear discussion of the methodological procedures and process utilised to respond to the study's key aim and objectives. The chapter thus, presents the concepts of research approach and design, study location, target population, sampling, data collection process and instruments used. The justification for the adopted methodology, rigorous ethical consideration in researches coupled with the limitations of the study (including mitigation measures) shall all be established in this chapter.

3.1 Research Philosophy

There have been various research philosophies introduced, and this particular research adopted the interpretivist paradigm. The research approach is influenced by the interpretivist paradigm because it allows for engagement with different individuals in their natural environments. It is a qualitative approach that focuses on exploring individuals' emotions and perceptions towards the subject matter.

3.2 Research Approach

Bryman and Bell (2012) suggest that a research approach provides a framework for data collection, analysis, interpretation, and presentation, which can be influenced by various philosophical assumptions. This study adopted a qualitative approach to thoroughly explore the meaning of a social problem or phenomenon, specifically the community's perception of Jumbo Mine in relation to development and heritage. The qualitative approach is appropriate for this study because it emphasizes quality assessment and provides quality results. Moreover, the interpretivist theoretical

assumption informs this study's approach. This approach allows for reflexivity and data collection within natural settings, enabling the researcher to examine the relationship between heritage and development. Additionally, the inductive nature of this approach allows for a holistic account of the issue, including multiple perspectives and diverse factors interfering with heritage and development. As a result, this approach enabled the researcher to develop a comprehensive understanding of the problem and sketch a larger picture of its complexity.

3.3 Research Design

The study used a case study research design which is defined as the setting of an investigation which enables observation and gathering of data within a neutral place which guides investigation towards objectivity. Mahadi & Husin (2021) posit that a case study research design helps obtaining in-depth answers to the objectives of the study as well as allowing the researcher to have an indepth investigation on key issues in their contextual settings (Yin, 2018). A case study is an intensive study, which is defined as an in-depth study of few units with multiple variables. This design suited best for this study because of its ability to draw together naturalistic, holistic, ethnographic, phenomenological, and biographic research methods in 'a palette of methods' (Merriam 2009). The aim of the case study is to know precisely the factors and causes which plain the complete behavioural patterns of unit. The case study technique, generally, studies the subject-matter qualitatively and covers all aspects of a single entity. The use of case studies is suitable when one wants to understand the interaction between a specific context and a phenomenon (Jacobsen, 2002). The study used the case study of Jumbo Ancient Mine to understand the nexus between heritage and development.

3.4.1 Target population

Population refers to the set or group of all the units on the findings of a research are to be applied (Shukia, 2020). According to Bryman (2012), the target population is the entire group of individuals that are of interest to the research. Target population refers to the participants in a given research. The researcher target residents of the Mazowe district living in and around the environment surrounding the Jumbo Ancient mine. The population involved residents, community/traditional leaders and artisanal miners. The research targeted these participants because they possess first-hand information on the developmental process of Jumbo mine as a heritage site.

3.4.2 Sampling Techniques

Sampling refers to "a proportion of the population" that is significant of a particular purpose in research (Pilot et al., 2001). William (2006) defines sampling as a process of selecting units from the population of interest so that the sample obtained will be used to generalise results from the population in which the sample was chosen. Konthari (2007) notes that the main advantage enjoyed from sampling is that, it saves time and efforts to the researcher by generalising the findings for the entire set. This is done in case of producing a few questionnaires for a selected group of representatives from the target population. The researcher depended on non-probability sampling to target participants.

3.4.2.2 Purposive Sampling

In purposive sampling, researchers hand-pick the cases to be included in the sample on the basis of their judgement and the cases" typicality and thus build up a sample that suits their specific needs satisfactorily (Cohen et al., 2000:103). As stated by Robson (2002), purposive sampling allows the researcher to choose a case in which s/he is interested. Furthermore, the researcher

chose purposive sampling because of the time and resource limitations. Denzin & Lincoln (2000) indicate that "many qualitative researchers employ purposive, and not random, sampling methods. They seek out groups, settings and individuals where... the purposes being studied are most likely to occur". According to Saunders et.al. (2009) purposive or judgemental sampling enables the researcher to use personal judgement to select cases that are enable to answer research questions and to meet objectives. For key informant interviews, the study also adopted purposive sampling as well. This latter sampling technique as asserted by Ritchie and Lewis (2003), is an informant selection tool mostly applicable in qualitative studies and implies judgementally subjective and deliberate choice of an informant on the basis of the qualities, expertise or experiences one possesses. As such, 5 key informants were selected including 2 NMMZ officials, 2 community leaders and one Chief curator. Basing on Creswell's (2014) recommendation, the researcher maintained this position until the saturation point was recorded.

3.5 Data Collection Procedures

The researcher depended on use of in-depth interviews to collect primary data. Secondary data was also used to draw parallels with empirical evidence. This was achieved through use of online resources, articles, seminar papers and related literature.

3.5.1 In-Depth Interviews

Being one of the most effective techniques used in qualitative studies, in-depth interviews were used by the researcher to obtain subjective analysis of the relationship between heritage and development at Jumbo Ancient Mine in Mazoe District, Zimbabwe. While guided by the interview guide, the researcher managed to fully explore the opinions of the participants to get a comprehensive perception on heritage versus development. To design the interview guide however, the researcher upheld Rubin and Babbie's (2011) recommendation that the researcher

should consciously draft and ask questions in the same manner or sequence to maximize comparability of responses. This allowed the researcher to ensure that data are gathered from all participants on all relevant issues surrounding the study. To this end, interviews were conducted with community members, artisan miners, community leaders and officials from the national museums and Monuments of Zimbabwe. Tashakkori and Teddlie (1998) assert that knowing what you want to find out, at least initially leads inexorably to the question of how one will get that information. According to Willis (2007), interviews provide one on one interaction between the researcher and the interviewee thus enabling the researcher to obtain information from a natural setting. It also helps the researcher to grasp different perspectives from the participants and was able to extract opinions at individual level. The researcher was very flexible in carrying out the interviews and as she asked open-ended questions, probed and encouraged informants to explain their unique perspectives. It is worth noting however that, the researcher ensured the use of vernacular language (Shona) among the participants and this helped in mitigating linguistical barriers that might have impeded the whole data collection process.

3.5.2 Document Review

The investigation immensely benefited from a variety of published materials in the form of textbooks and e-journals. As part of secondary data, document review was used by the researcher to obtain relevant information that provides insights into the phenomenon under study. The researcher used reports, books and journals; including e-materials on various websites and examined a variety of topics that deal with heritage and development, institutional management of heritage, legal framework and roles of communities in heritage preservation. These sources were very critical in building a solid base of the study by exposing gaps for research and facilitated

avoidance of regurgitating previous works and their findings. This data collection tool also helped the researcher to serve time and unnecessary travelling costs to some of these agencies.

3.6 Ethical Consideration

3.6.1 Seeking Permission

The researcher initially sought permission from the responsible authority and in this case the researcher sought permission from NMMZ. The chief curator signed the consent form and the researcher was granted permission and she took the opportunity to brief participants about the study purpose and objectives as she sought their permission as advised by the local authorities. Creswell (2014) supports that any research that is conducted in institutions just like in communities, demands one to seek permission from the authority of the people in charge under which the participants fall under.

3.6.1 Voluntary Participation

Participants were given an opportunity to participate voluntarily without being coerced to do so.

This ensured that responses were in line with objectives and research questions. They were also informed that they could withdraw from the research at any given time.

3.6.2 Informed Consent

All participants were informed about the purpose and agenda of the research which is understanding the moderating influence of given factors in the adoption of mobile banking. Furthermore, the researcher indicated to the informants that the research had been approved by the university through the letter of approval, stamped and dated.

3.6.3 Anonymity

The researcher also highlighted to the informants that their names will not be published in the research paper or revealed to anyone. In event of using participants' names, pseudonyms or codes would be used in lace of their names to keep their names unknown.

3.6.4 Confidentiality

The researcher gave guarantee to the participants that any information concerning the research and their views will be kept secret and were necessary names will be removed from any documents. They were informed of the use of passwords for computers files and use of safe room to keep the information.

Data Analysis and Presentation

The researcher utilized thematic analysis as a method for analyzing the data collected. According to Braun and Clarke (2006), this technique involves recognizing and reporting recurring patterns within the data. Thematic analysis is often used by qualitative researchers to code large amounts of information and extract meaningful qualitative data (Creswell, 2014). The process involves combining participants' perceptions through a comprehensive analysis of the data collected to formulate themes that represent related responses, as described by Nowell et al. (2017). To obtain original comments, reactions, feelings, and attitudes of participants, the researcher used process recording in a natural setting. Thematic analysis played a crucial role in organizing the excessive qualitative raw data, turning it into themes that made sense. The researcher followed the six steps of thematic analysis as defined by Braun and Clarke (2006) until data saturation occurred. These steps include familiarization with the data, creation of initial codes, a search for themes, revision of themes, definition and naming of themes, and production of a report.

3.8 Chapter Summary

In conclusion, the above analysis provides an utline of how the research was conducted using the case study of Jumbo Ancient Mine. It also outlined the data gathering tools that were deemed relevant for the study and qualifies as the best tools. In closure the chapter also gave an overview of the methods to be adopted in analyzing and validating data collected from the case study.

CHAPTER 4:DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.0 Introduction

This chapter focuses on the presentation and analysis of data through the use of thematic data analysis and discussion of findings on heritage versus development at Jumbo mine. The crux of the study was to gain an introspection into the views of the community surrounding Jumbo ancient mine in line with development and heritage issues in the area. Data was collected through the use of in-depth interviews, observations and documentary reviews. 12 participants were interviewed including 5 key informants, 2 artisanal miners as well as 5 community members. The chapter is coherently aligned to the study objectives, theoretical framework as well as the connection between the findings and the literature reviewed. Participants were interviewed through the use of vernacular language which was later transcribed to English language.

4.1 Geographical Location of Jumbo Ancient Mine

Jumbo ancient mine is located in the Mazowe district of Mashonaland Central province in Zimbabwe, Africa. The mine is situated approximately 150 km north-east of the capital city, Harare. The major economic activity around the Jumbo ancient mine is gold mining. It has been reported that the Jumbo gold mine was one of the largest producers of gold in the region during its time. In addition to the Jumbo mine, there are several other gold mines in the Mazowe district that contribute significantly to the local economy. Apart from gold mining, other economic activities in the area include farming, livestock rearing, and tourism. The Mazowe district is known for its fertile soil, and agriculture is a major source of income for many of the local people.

4.1 Benefits of Jumbo Mine to Local Communities

Participants provided a plethora of benefits accruing from the existence of the site within their community. These were ranging from socio-economic, cultural as well as environmental benefits. The site is perceived as a major source of livelihood within the area and a legacy for future generations.

4.1.1 Socio-economic Benefits

During interviews participants highlighted that the existence of Jumbo mine in the community was a benefit to them in as much as there was creation of employment and the circulation of currency. Due to the high rate of unemployment in Zimbabwe, the mine is providing opportunities especially to the youths and other adults in maintaining their livelihoods. Participant 1 highlighted that:

"The site has enhanced the livelihoods of many youths in the area as they spend much of their time looking for gold since there are no better paying jobs in Zimbabwe....this is our portion of wealth from our heritage and truly speaking my sister I am able to pay rent, school fees for my children and bring food on the table"

One of the key informants also uttered the same sentiments as she said that:

"Since the closure of Jumbo Mine by Metallon Gold Corporation in 2018, quite a number of people lost their jobs and artisanal mining has become an employment opportunity for local people in alleviating poverty and reduce unemployment rates as well as rapid circulation of United States dollars. Miners, also known as Magweja or Makorokoza (those who enter shafts illegally), make up the bulk of the economically active population and the majority of them are young guys aged 16 to mid-30s"

The above findings clearly denote that local communities benefit from the existence of Jumbo mine by bringing employment opportunities and boosting the local circulation of currencies. This is in line with Martinez Smith and Malones' (2023) view that artisanal mining typically provides job chances to persons who do not have access to other types of formal work. These includes marginalized groups such as rural communities, women, and teenagers who may struggle to find other types of employment owing to reasons such as insufficient education and skills, geographic isolation, or prejudice. Macheka's (2016) view is validated in this context when he argues that heritage sites create opportunities for local communities in as much as participants appreciated the existence of the mining site. The findings established that, employment is critical to human development because it allows people to contribute to society, make a living, and enhance their level of life. This resonates with the view by World Bank (1998: 15) that heritage is a "development asset" that may be leveraged to "catalyze local-level development," create employment, produce revenue, rejuvenate local urban and rural regions, and boost communities' social capital. Despite the fact that artisanal mining may have some negative impacts on the sustainability of the site, it is imperative to note that the well-being of the present generation is of great importance considering the state of the economy in current Zimbabwe. In relation to sustainability of heritage, artisanal mining at Jumbo heritage site reflects sustainable mining practices that are incorporated through regulation, as well as training of miners provided through the Metallon Gold Corporation which can also be passed on to future generations. However, comparing with Great Zimbabwe Khami Ruins and other heritage sites recognizable, it is evident that they provide formal; employment under tourism compared to Jumbo mine which has got informal employment which is unpredictable and unsustainable. This poses a threat on the socioeconomic well-being of miners in as much as they are engaged in illegal employment opportunities resulting in their arrest and deaths.

Furthermore, a survey by The Anchor in 2019 established that various opportunities are sustaining the livelihoods of the people. Alice Moyo a participant from the study highlighted that the site does not only benefit artisanal miners but also people who are engaged in vending and public transport. She commented that:

"This area provides opportunities to people like taxi drivers, currency traders also known as "money changers" and loan sharks as well as vendors who sell clothes, groceries, cooked food or even condoms since everything sold here is bought because these guys spend like there is no tomorrow so normally I go home with enough money to feed my family"

This therefore shows that the socio-economic benefits of the site are not only benefiting artisanal miners but also other people who are engaged in informal work. This therefore shows that the heritage site is playing a major role in enhancing the lives of the people surrounding the site.

4.2. Cultural Benefits

The researcher probed on the benefits of the site to the community in relation to cultural heritage and their responses established that Jumbo mine as a heritage site serves as a historical asset. Jumbo Mine heritage site serves as an indicator of Zimbabwe's rich cultural past and the vital role mining played in the country's growth. The chief curator from NMMZ provided a comprehensive description on how the site is a great cultural heritage to the community by highlighting that:

"This site has played a vital role in the community, not just as a source of livelihood for many but also as a way for Zimbabweans to connect with their cultural heritage as

Zimbabwe has a long history of mining, and enables people to tap into that history and following in the footsteps of their ancestors while supporting themselves and their families because artisanal mining offers an opportunity to mine minerals such as gold which has been part of Zimbabwe's cultural heritage for centuries since miners also utilize traditional methods, such as panning, which have been passed down from generation to generation..."

This clearly show that the site is a crucial tool for educating current and future generations about their predecessors' activities and how it shaped the community to its current state. The ability of ordinary people from surrounding communities to interact with their heritage shows a sense of ownership and responsibility of the citizens in as much as they enjoy that which has been left by their ancestors. The continuous application of traditional ways of mining on the site provides a clear evidence that mining skills can be passed on from generation to generation which forms part of heritage for future generations. This view therefore validates the goal of the sustainable development theory that future generations have access to the same enhanced opportunities as the present generations (Darvishi, 2019). Cultural heritage provides long-term growth by fusing modernity and tradition and by combining the legacy of the past with innovative ideas aimed at moulding the future thus, utilizing ancient and modern mining methods.

According to Banda et al., (2019), integrating cultural variables such as traditional knowledge systems and sustainable practices, which are critical in balancing heritage protection and Sustainable Development, is critical. Heritage is thus viewed as a resource that not only maintains historic memory but, when exploited imaginatively, can also deliver a variety of social and economic advantages to a wide range of stakeholders. It increases the visibility of locations, making them more competitive in today's globe, and acts as a source of inspiration for the current

arts and creative sectors. Furthermore, communities around Jumbo may commemorate their ancestors' lasting contribution on the country's mining economy through artisanal mining. This exercise teaches people about mining and their history while also creating a profound respect for their heritage. Artisanal mining has become an important part of Zimbabwe's economic and cultural fabric, allowing Zimbabweans to appreciate their history while earning a living.

4.3 Factors Threatening the Sustainability of the Site

A plethora of threats were presented by participants that directly impede the sustainability of the site. Land degradation as a result of artisanal mining, lack of heritage management and corruption are major treats to Jumbo mine site.

4.3.1 Land Degradation

When asked on the threats to the heritage site, key informant 2 noted that artisanal miners are a major driving force to the destruction of the site. Through documentaries provided by the Key informant, it was evident that Jumbo mine was once a visible and eye catching site for mining and tourism but the existing conditions of the site shows that it was destroyed. The researcher noticed that artisanal miners dug the ancient mine and dumped sand on top of the site. She highlighted that:

"it's been two years since I visited this place and it is now difficult to locate the actual ancient site due to illegal mining activities that destroyed the remaining evidence...the remaining tangible evidence that we have as of now are these documents with pictures and files showing the existence of archaeological findings of ancient activities on this site.."

Basing on these findings, one can juxtapose the development of other sites as discussed in the literature such as Great Zimbabwe by noting that the site is still visible and identifiable as a heritage

asset and a great tourism attraction compared to Jumbo heritage mine. The conditions of Jumbo mine heritage site are an indication of the dangers of human exploitations that are hindering sustainable development in as much as the present generation is not able to identify the actual archaeological heritage site. This is a clear failure on the preservation of heritage. This is in tandem with Chivores' (2021) argument that artisanal mining contributes to land degradation as shown in fig 1.1 below. One of these negative consequences is that the environment has become an eyesore and a hazard to humans. Mining has shown to be environmentally unsustainable, despite the possibility of rehabilitation or safer extraction methods when done officially.

The majority of artisanal mining work done unofficially at the site is mainly damaging, with severe environmental repercussions including deforestation, sedimentation, empty valleys that endanger humans and animals, and the use of toxic chemicals such as mercury and cyanide which poison water sources and human lives (Hilson & Van der Vorst 2002). Shoko (2002) also noted that land degradation reduces the visual appeal of the environment by leaving open holes and sand piles. Exploration for natural resources is not a new phenomenon and the move from exploration to exploitation has historically had a disastrous impact on the ecosystem and society as a whole. Martinez-Alier (2002) said unequivocally that future generations will bear the consequences of poor environmental policies regardless of economic development. As a result, mining activities promotes physical harm to the site, such as topographic changes, plant clearance, and soil disturbance. This therefore shows that the sustainability of Jumbo mine heritage site is questionable since illegal unmonitored activities are taking place compromising the site for the benefit of future generations.

Fig 1.1 The picture below shows land degradation by artisanal miners

4.3.2 Lack of Proper Heritage Management

The study findings established that inadequate management at Jumbo mine results in neglect or exploitation of the heritage asset, compromising its authenticity or cultural relevance. The lack of regular heritage management in mining heritage sites, such as Jumbo Mine in Mazowe, exacerbates to a number of threats and negative impacts. Key informant 4 cited that:

"the absence of enough financing and resources, or even qualified employees devoted to maintaining and protecting the site is something else....management being haphazard, resulting in ad hoc judgments and lack of consistent protection throughout time, leaving heritage sites vulnerable to harm or annihilation"

This perception resonates well with the opinion provided by key informant 5 who argued that:

"Jumbo Mine has a rich history and cultural significance, but without proper heritage management, structures may be destroyed or lost forever and this results in loss of historical and cultural resources"

These findings are in line with Aplin (2017) who argue that almost 95% of African heritage are being afflicted by management issues, a lack of conservation, risks to authenticity, and environmental pressure. In a variety of ways, a lack of heritage management poses a substantial danger to growth. Heritage sites have tremendous socioeconomic importance and are important tourist attractions. As a result, ignoring heritage assets can have a detrimental influence on the tourism sector, lowering an area's economic growth. Furthermore, because heritage monuments have cultural and historical value, their removal or degradation might jeopardize a country's cultural identity, which is essential to its growth. Ignoring heritage management may also contribute to environmental degradation since heritage sites are not adequately protected. The loss of forests, trees, and other natural resources inside or near historic sites can cause irreparable environmental damage. Furthermore, bad historic management might jeopardize the lives of indigenous peoples that rely on these places. Finally, maintaining and protecting cultural assets is critical for long-term development since it boosts economic growth, protects local culture and history, and promotes environmental protection.

4.3.3 Corruption

Corruption at Jumbo mining heritage site involves unethical and criminal actions such as fund bribery, embezzlement, and other types of illicit activities that occur in the setting of historical mining site. This form of corruption had variety of undesirable consequences, such as environmental damage, social inequities, and the destruction or loss of cultural assets. Through documentary review of Newsday article (2021), the researcher established that in relation to preservation and conservation of the site:

"The corruption going on there is unprecedented...for any police officer to be deployed there, he or she has to pay a bribe of US\$20 to his superiors so they have become accomplices when they should be helping to protect the mine, they have joined the looting spree and practice artisanal mining. The mine is, however, not suitable for that. It is ideal only for heavy-duty mining as it has very deep tunnels which are dangerous. Several accidents take place there and some go unreported. As we speak, there are three dead bodies inside (mine shafts) which have not been retrieved"

From this finding, it is evident that corruption is a threat to the sustainability of the mining heritage site. Corruption is one thorn in flesh hindering the preservation of the heritage site in as much as it is compromising the development of the site in line with the goal of sustainability to benefit both present and future generations. Corruption penetrates the very beginning of the mining project and it is more likely to occur throughout the process. This degrades how activities are monitored and controlled and weakens the collection of taxes and royalties, as well as harming the site's connection with the community (Nomishan, Tubi & Gubam 2021). Corruption may occur at multiple levels at mining heritage sites, including government authorities, mining firms, and local

populations. Authorities illegally provide mining licenses to firms that lack appropriate permits. Companies may then profit from the locations without making the necessary investments to safeguard cultural and natural treasures. Therefore, one can note that the continuous existence of artisanal miners is as a result of corruption at the mining site as the authorities are the ones providing entry through bribes. This poses threats to human lives as well in as much as miners gets trapped underground after tunnels collapse.

During interviews, 2 artisanal miners highlighted that the site was their heritage belonging to their ancestors and they have responsibility to benefit from the inheritance. However, this was compromised as they noted that the government's ignorance of the site in order to continuously exploit the area in silence inhibits them to work freely. The following expressions were given by two of the miners:

"Our fathers used to mine gold on this land on a small scale in the past, but government gave the land to the companies. Anywhere we find more gold on the remaining land, the company comes and declare that the place is for them so we have to sneak through some places and get some gold so that we can sell to sustain ourselves and our family since the government use these site for personal gains."

Another elderly miner responded blaming the government for ignoring corruption and exacerbated the destruction of the site when he noted that:

"I think these issues involve the government through corrupt authorities because they benefit more on this site and as you can see, the site is not even close to look like something monitored and taken care of since they are able to send their men to exploit gold for their own gain, the roads are like graves and no tangible development was done even when I was still employed under Mettalon, no development at all!"

The aforementioned expressions points to the issue of corruption which is regarded as one of the cankerworms that eat development. The participant's assumptions on the exploitation of the land by the government and other companies for their personal gains validate the expressions given by New Zimbabwe (2021) on the issue of corruption. The following expressions were extracted from New Zimbabwe report:

"They are allowing artisanal miners to plunder the mine and also unlicensed gold dealers to trade and they pay a certain fee in return...The money is then used to finance Kazembe's political undertakings as he is now busy campaigning to retain the Zanu PF provincial chairmanship in what is turning out to be an intriguing race. There is a whole cartel of unlicensed and untouchable gold dealers operating in the area."

Corruption hinders development to a greater extent in as much as funds are channeled for other purposes rather than developing the surrounding communities as well as the site itself. The involvement of responsible authorities in corruption presents a challenge to sustainable development. Corruption also erodes confidence among the government, mining firms, and local residents. When firms and politicians are seen to be corrupt, they lose public trust, making it difficult to get support for economic projects. As a result, cash and resources are not directed to the places that require them the most. Furthermore, corruption in the mining sector results in unequal income distribution, with huge international mining firms profiting at the expense of smaller local enterprises and the communities in which they operate. This has the potential to worsen economic inequality while also limiting prospects for local economic progress. As a result,

combating corruption on mining sites is critical in order to achieve equitable development that benefits all stakeholders.

4.3.4 Violence by Artisanal Miners

Lack of knowledge on the preservation of the site poses a deleterious impact on the sustainability of the site. Three of the interviewed participants highlighted that illegal mining and the related violence pose severe danger to Mazowe's Jumbo Mine. Illegal artisanal miners frequently enter mines, engage in violent fights with security forces, and steal minerals as well as other important assets. These illicit actions endanger legitimate mining operations, the environment, the employees' health and safety, and the community at large. This was noted by one community member who said that:

"This is more like a war zone mmm these guys fight like dogs and sometimes they fight against security forces using machetes which then becomes difficult to protect this site, and it is not in our minds that this is a heritage site that must be protected but rather a place for survival through exploits"

Minister Kazembe Kazembe quoted in Herald (2021) also highlighted that:

"If sanity is not restored, nothing will be left as all the resources will be looted, we are talking of devolution and Mashonaland Central will be left with nothing to show for its vast mineral resources if this lawlessness continues unabated"

The above dictum shows a clear introspection into issues of preservation of the site that is, it is threatened by security issues as a result of the violence from artisanal miners. The views provided by Minister Kazembe Kazembe shows that the authorities are aware of the ongoing illegal operations as well as the consequences thus, the area will be left with nothing to show as part of heritage. This points to continuous negative exploitation of minerals despite the existence of security forces in as much as corruption infiltrating the authorities. The ability of illegal miners to forcefully enter protected areas poses a major threat into issues of protection since they end up using dangerous mining method such as the aforementioned issue that has to do with the use of mercury which is harmful to both the environment and the people. From the expressions provided by the key informant, it is evident that people in Jumbo mine community view the site as a place for exploit rather than a heritage sites. The lack of knowledge on the part of artisanal miners through illegal mining points to the issue of sustainability thus, the mining area is exploited heavily without consideration of the benefits that are supposed to accrue from mining the site for the benefit of communities as well making the site a tourist attraction.

4.3 Contributions of the NMMZ in Maintaining and Protecting the Site

National museums and monuments played a crucial role in preserving cultural and historical sites such as Jumbo Mine in Mazowe. NMMZ is credited for its efforts in maintaining and protecting the site from artisanal miners through its partnership with security forces such as the police and providing boundaries such as fences and prohibition signs on the site well as documenting the history of the site for future use.

Key informants cited that the NMMZ played a major role in the protection of Jumbo mine despite various challenges. One of the KI highlighted that:

"the institution tried much by putting billboards with warning signs as well as fencing the area but as you can see all the developments in a contention to protect the site are

compromised by artisanal miners who are destroying the fences and structures built for preservation"

Key informant 2 also highlighted that:

"... the NMMZ engaged with the police and government so as to get rid of artisanal miners but it was not fruitful since there was corruption among the officers as well as lack of political will".

The above findings established that efforts were made by NMMZ to reduce the negative exploitation of the site which were compromised by corruption and violence erupting from the site. From observation, it was evident that there were billboards that were removed from the site and the fence was taken and utilized solely for personal gains by artisanal miners. This is a major challenge when people do not respect and value the efforts in preservation through the use of regulatory signs and barriers.

Moreover, it is also vital to note that research and keeping of records of the Ancient site by NMMZ is a major move to keep the heritage in form of written records as well as pictorial evidence to show the conditions and detail in relation to the site. One of the key informant noted that:

"these records are the ones that we managed to keep in form of pictures so as to show the future generation about the ancient mining methods used by their ancestors and be able to preserve as well as locate the ancient sites through these documents"

This therefore shows that documentation and research are crucial contributions of the NMMZ in preserving Jumbo heritage site. The sustainability of the site is questionable especially from the views of the key informant as he noted that the documents will be used for future reference. In

terms of development, records have nothing tangible to offer compared to actual preservation of sites. It is vital to merge pictorial evidence and physical evidence. In relation to development, it can be noted that such contributions through research and documentation are not useful mainly because day by day the pictures and the environment on the ground are different which then poses a question on the use of records. During interviews participants noted that they are not aware of an organization called NMMZ and this can be attributed to its limited contributions especially on site.

However, from the findings on the issue of contributions, it is evident that the institution itself failed to contain the exploitation of the mining site due to the existence of illegal miners and corruption erupting from the site. Lack of resources to cater for development and preservation processes also presented a challenge for NMMZ.

4.4 Suggested Measures that can be Used to Protect the Site

Diverse measures were highlighted in relation to the protection of the site. The initial measure was to implementing strict access controls to the mining site so as to reduce continuous negative exploitation of the heritage in line with sustainable development.

4.4.1 Providing more Security Forces

The participants noted that in order to preserve and protect the site, there was need for reinforcement in terms or security forces. Since the area is highly saturated with high crime rates and violence, it was seen necessary to secure the area in order to allow licenced miners to gain access and operate legally. One of the elderly cited that:

"..this can include security personnel stationed at the site to prevent vandalism, theft or other forms of tampering with the site because honestly these dangerous people have destroyed the site judging from what I witnessed some years back haaaa it might be too late but necessary"

Providing more security forces at Jumbo Mine Mazowe Ancient Mine is important in as much as the site is a vital heritage asset that has historical and cultural significance. As such, it is crucial to provide protection from any damage or destruction by unauthorized persons who might want to exploit it for their own gain. Mining activities have a negative impact on the environment if they are not done responsibly hence, providing adequate security forces can help prevent unauthorized mining and protect the environment from any potential harm. An increase in security forces can increase safety and reduce the potential for criminal activities. This is particularly important in areas where illegal mining activities are prevalent and can pose a risk to the local community. The chief curator at NMMZ also expressed that the site is an important tourist attraction that can generate revenue and promote tourism in the region and by ensuring the site is well-protected and secure, more tourists are likely to visit, which can contribute to the local economy. Therefore, providing more security forces at Jumbo Mazowe Ancient Mine is essential for protecting the site, environment, ensuring safety, and promoting tourism

4.4.2 Community Engagement and Education Programs

Community engagement in decision making and planning purposes is crucial for the protection of Jumbo Ancient as key informant noted that this will be beneficial in the sense that they will be able to contribute since there will be an element of responsibility.

"in order to win this war, everyone must be included in decision making processes and recognize their contributions which will assist the majority of the people to teach their offspring about the importance of the site"

Much of the artisanal miners come from the local communities as noted by the Key informant and this literally means that educating the people about the dangers of destroying the heritage site will be useful in preserving it. Education programs help to raise awareness among the local community members about the history and significance of Jumbo ancient mine. This can help to preserve the site from vandalism or decay. The ancient mine site holds significant cultural value and education programs can help locals appreciate the mine and its role in their history. Community engagement programs assist on creating sustainable tourism through responsible visitor management, which can contribute positively to the local economy. Education programs can help to promote sustainable development, encouraging communities to adopt practices that reduce environmental damage. Education programs can help to inform locals and visitors about the risks and dangers associated with visiting the site, ensuring that everyone is well-informed and safe.

According to Banchirigah (2008) education programs are important for the communities as they empower individuals with the knowledge necessary to make informed decisions and take participatory action in preserving their site thus, it resonates with sustainable development. For instance, educating people about the importance of the site and how it will benefit them helps to encourage participation in preservation programs. Such programs can help build support and mobilize communities to take action. When people feel that their actions can make a difference, they are more likely to participate in conservation efforts. Working with local communities can help raise awareness about the importance of protecting the Jumbo Mine site, and can also involve

them in decision-making processes related to the site's management. The poor and uneducated are ignorant of the threats of illegal mining to the environment and its consequences on sustainable development so they practice illegal mining (Hilson, 2009). Poverty, according to this narrative is not only concerning the inadequacy of income or sources of income but also inadequate alternative economic opportunities to enable the people observe the principles of sustainable development.

4.4.3 Creation and Enforcement of Policies for Regulation

Key informants endorsed issues to do with the creation and enforcement of policies and regulation in order to reduce the informality and tempering of ancient heritage sites by illegal miners. Key informants suggested that EMA and the Government must implement policies that reduce the continuous land degradation. One key informant cited that:

"The policies create guidelines for safety measures that must be followed by employees, visitors, and anyone who comes into the mine and this helps prevent accidents, injuries, and even fatalities and as you know that policies on environmental protection measures can limit the amount of environmental damage or pollution that could result from mining activities and go a long way to preserve the natural habitat of the surrounding area but this can only be achieved if the government take it seriously"

Proper policies help in ensuring a standardization in the mining processes, procedures, and protocols within the mine, which helps to maintain productivity and overall efficiency of the mining operations. Policies help the mine to comply with legal regulations and standards set by the government and international bodies thus ensuring the mine isn't sanctioned or closed down as a result of non-compliance. The consistent enforcement of policies and regulations in operations

at the mine can help to improve the reputation of the mine, increase investor confidence, and maintain the long-term sustainability of the mining operations.

4.5 Chapter Summary

The chapter focused on the presentation and analysis as well as discussion of study findings. The chapter was aligned to the study objectives as well as the suggested theoretical framework. The chapter initially looked into the socioeconomic benefits of the site, threats to the sustainability of the site, the contributions of NMMZ in preserving the site as well as suggested measures that can be used to protect the site.

CHAPTER 5: SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND AREAS

FOR FURTHER RESEARCH

5.0 Introduction

This chapter summarizes the study findings on heritage vs development. It is structured in three sections were the first section provides a summary of the study findings according to objectiv the second provides the conclusion of the study findings, and the recommendation of the study in accordance to the study findings, implications to the profession as well as areas for future study.

5.1 Summary

The aim of the study was to examine the perception of the community surrounding Jumbo mine in line with development and heritage issue in the area. The objectives of the study were to investigate how communities living around the site benefit from the use of the site as well as identifying threats that affect the heritage site. They also include an assessment of the extent to which national museums and monuments are able to protect the archaeological sites from negative exploitation and to examine the ways that can be used to protect the local heritage sites in line with sustainable development.

The findings established that the existence of Jumbo mine in the community has socioeconomic benefits. This is due to the fact that there is creation of employment at the site mainly artisanal mining which then improves the well-being of the people in the community. Economically, the site facilitates the circulation of hard cash which boosts the local circulation of currencies. The study also shows the applicability of the theory of sustainable development thus, employment is

critical to the development of human beings. It was noted that despite the negative impact of artisanal mining on the sustainability of the site, their well-being is far much important compared to keeping the site for future generation. Therefore, mining activities taking place at jumbo mine which are regarded as illegal are considered by the community as part of their heritage as they have access to mining services. The study also established cultural benefits in as much as people from surrounding communities interact with their heritage which shows a sense of ownership and responsibility of the citizens in as much as they enjoy that which has been left by their ancestors. Furthermore, the continuous application of traditional ways of mining on the site provides a clear evidence that mining skills can be passed on from generation to generation which forms part of heritage for future generations.

The study also delved into issues to do with the factors threatening the sustainability of the site. Jumbo Heritage Mine demonstrates the dangers of human exploitation and a lack of sustainable development. The existing conditions of the Jumbo Mine site, where the present generation cannot recognize the actual archaeological heritage site, signifies a failure in heritage preservation. According to the findings, African heritage is affected by management issues, lack of conservation, environmental pressure, and risks to authenticity. The lack of heritage management also led to environmental degradation, and the loss of natural resources. Furthermore, improper management of historical sites can endanger the lives of indigenous people who depend on these sites. To ensure long-term development, it was noted that it is critical to maintain and protect cultural assets that help promote economic growth, protect local culture and history, and promote environmental protection.

Moreover, Corruption hinders development as funds are channelled away from communities and the site itself, presenting a challenge to sustainable development. The involvement of responsible authorities erodes confidence among government, mining firms, and local residents, leading to unequal income distribution and limiting prospects for progress. Successful economic projects require public trust, so combating corruption on mining sites is critical to achieve equitable development that benefits all stakeholders. The presence of corruption poses a significant challenge to the sustainability of the mining heritage site. It hinders the preservation of the site and compromises its development in line with sustainability goals. Corruption begins at the early stage of the mining project and can occur throughout the process, weakening the monitoring and control of activities, tax and royalty collection, and community connection.

The NMMZ made efforts to reduce negative exploitation of the Jumbo heritage site, but corruption and violence from illegal miners compromised these efforts. Billboards were removed and the fence was used for personal gain. Documentation and research were seen as crucial contributions to preserving the site, but its sustainability is questionable. Incorporating physical evidence alongside pictorial evidence is important. Participants were not aware of the NMMZ, indicating limited contributions on-site, and lack of resources presented a challenge for the institution to contain exploitation.

The findings suggest that NMMZ has been making efforts to reduce negative impact on the site, which has been compromised by corruption and violence. Billboards were removed and the fence was utilized by artisanal miners for personal gain. This poses a challenge when people do not respect the preservation of the site through regulatory signs and barriers. Additionally, NMMZ's efforts to conduct research and keep records of the ancient site is important in preserving the

heritage for future generations. Written records and pictorial evidence can showcase the condition and detail of the site.

Participants discussed the need for increased security forces to protect the Jumbo Mazowe Ancient Mine site from unauthorized mining and damage. The presence of security forces can also increase safety and reduce the potential for criminal activity, which is especially important in areas with high crime rates. Additionally, licensed mining can be facilitated with increased security measures in place. Community engagement through education programs is crucial for the protection and preservation of the Jumbo Ancient Mine. Education programs can also promote sustainable development, responsible tourism, and reduce environmental damage. Community engagement is essential for the protection of the Jumbo ancient mine. Educating locals about the significance of the site through education programs can raise awareness and promote sustainable development practices, encouraging participation in preservation efforts. Creating policies and regulations can help reduce the informality and damage caused by illegal mining. Proper policies can ensure compliance with legal regulations and standards while maintaining efficiency and productivity. With consistent enforcement, the mine's reputation can improve along with investor confidence and long-term sustainability.

5.2 Conclusions

The study focused primarily on the positive socioeconomic and cultural benefits of the jumbo mine to the community, whilst acknowledging the potential negative impacts of artisanal mining. However, it is important to note that sustainable development requires not only social and economic but also environmental considerations. Additionally, while employment is certainly important for the development of human beings, it is vital to ensure that the employment created

is safe, fair, and free from exploitation or other negative impacts on workers' rights. Suffice to say, without more information on the specific working conditions at the mine, it is difficult to draw a conclusion as to whether the benefits outweigh the potential risks.

The case of the Jumbo Heritage Mine emphasizes the significance of preserving heritage sites for sustainable development. The neglect of such sites not only has cultural and environmental consequences but also impacts economic growth. Therefore, it is crucial to manage these historical sites appropriately to preserve the heritage and culture of communities, promote sustainable development, and protect the environment. It is vital that all stakeholders recognize the significance of cultural heritage and work collaboratively towards its preservation to ensure the well-being of future generations.

The study does not fully explore the root causes of corruption in mining communities, which are often linked to larger systemic issues such as weak governance, lack of accountability, and inadequate legal frameworks. While it is important to address corruption at all stages of the mining process, simply taking action against individual cases of corruption may not be enough to create lasting change. Moreover, the emphasis on public trust may overlook the perspectives and experiences of marginalized groups who may not have equal access to decision-making processes or who may have different priorities than those of the wider community.

The National Museum and Monuments of Zimbabwe (NMMZ) have made commendable efforts to preserve the Jumbo Heritage Site, but corruption and violence from illegal miners have compromised their efforts in attaining sustainable development. Inadequate resources have also presented a challenge for the institution to contain exploitation. More proactive measures such as increased funding, collaboration with local communities, and effective law enforcement are

necessary to ensure the preservation of the heritage site. However, incorporating physical evidence alongside pictorial evidence would improve preservation efforts.

The study findings do not address potential negative impacts that increased security measures may have on the local community. The involvement of security forces may lead to tensions and mistrust between the community and authorities, especially if there is a history of conflict. Additionally, stricter regulations and enforcement may lead to job losses for informal miners who rely on the site for their livelihoods. Therefore, it is imperative to note that heritage and development especially human development are inseparable since heritage must benefit local people.

5.3 Implications

Culture and heritage studies help in understanding how built and natural heritage sites can contribute to sustainable development, particularly in terms of cultural tourism and local community engagement. Cultural tourism can provide economic benefits to communities, including job creation and revenue generation. However, development can also threaten the authenticity and integrity of heritage sites, especially if it leads to overdevelopment, overcrowding, and environmental degradation. Therefore, culture and heritage studies can provide with insights into how to balance the needs of heritage preservation and development. By incorporating community perspectives and negotiating between various stakeholders, cultural and heritage studies can help to ensure that development is sustainable and respectful of local cultures and traditions.

5.4 Recommendations

To the Government

- The government must draft policies that preserve the heritage sites as well as to revising the existing policies. Community engagement, consultation, and participation must be prioritised in the decision-making processes related to cultural heritage sites and their development. This approach will ensure that local communities have a say in the management and preservation of their heritage
- The government should ensure that proper maintenance of this site is carried out regularly including repairs and restoration to damaged structures.
- The government of Zimbabwe should work together with the local community, including traditional leaders and cultural groups, to raise awareness about the significance of the Jumbo Mine. They can involve the community by organizing events like cultural heritage festivals and inviting them to participate in heritage preservation programs.

To Communities

Communities must be able to impart knowledge to the people on the importance of
preserving heritage sites for cultural benefits which is in line with the sustainable
development as it benefits the future generations. By educating the younger generations
they can also learn to appreciate and value it.

To NMMZ

 Greater outreach and education efforts are needed to increase community involvement and awareness. To sustain preservation efforts, collaboration with relevant stakeholders and effective enforcement of laws are necessary. A more nuanced analysis of the social and political dynamics of mining communities is needed to effectively address the challenges of corruption and sustainable development in this context

5.5 Areas for Further Research

- A quantitative study could assess the economic impact of the development on the area around the Jumbo ancient mine, including the local community and businesses.
- A review of the existing national policies and legal frameworks related to heritage conservation, development, and Indigenous rights can identify areas of synergy or conflict with the proposed development activity. This can inform the design of a regulatory framework that promotes good governance, accountability, and transparency.

5.6 Chapter Summary

The chapter provided a summary of research findings according to objectives showing how each research question was answered. Issues relating to conclusions emanating from the study were scrutinised as well as recommendations. Implications as well as areas for future study were also established in this chapter.

Reference

A. Abraham, K. Sommerhalder, and T. Abel. 2010. Landscape and well-being: a scoping study on the health-promoting impact of outdoor environments. *International Journal of Public Health* 55(1), pp.59–69.

Agyeman, E. A., Appah, E., & Oduro-Kwarteng, S. (2014). Socio-cultural Impacts of Tourism: A Case Study of the Elmina and Cape Coast Castles, Ghana. *International Journal of Marketing and Technology*, *4*(3), 213-230.

Aplin, G. 2017. World heritage cultural landscapes. *International Journal of Heritage Studies*, 13(6), 427-446.

Azevedo, S., & Mello, L. C. B. (2018). *Cultural heritage, sustainable development, and public policies in Brazil*. Sustainability, 10(11), 4162. https://doi.org/10.3390/su10114162

Azzopardi, E., Kenter, J.O., Young, J., Leakey, C., O'Connor, S., Martino, S., Flannery, W., Sousa, L.P., Mylona, D., Frangoudes, K. and Béguier, I., 2023. What are heritage values? Integrating natural and cultural heritage into environmental valuation. *People and Nature*, 5(2), pp.368-383.

Banda, S., Namafe, C., Chakanika, W., 2016: Traditional Environmental Knowledge among Lozi Adults in Mitigating Climate Change in the Barotse Plains of Western Zambia; University of Zambia, Lusaka.

Cerra, D., Plank, S., Lysandrou, V., Tian, J., 2018, 'Cultural heritage sites in danger: Towards automatic damage detection from space', Remote Sensing, Vol. 8, No 9, 781.

Chipunza. T. K. 2021. Zimbabwe's Archaeological Heritage.

Chivore. V. 2021. Understanding small scale gold mining activities in Mazowe District in Zimbabwe through an Environmental Security lens for the period 2017-20. International Journal of Scientific and Research Publications, Volume 11, Issue 2.

Crowther, D., Seifi, S., and Moyeen, A. 2018. *The goals of sustainable development, responsibility and governance*. University of Derby, UK.

Darvishi, A .2019. Sixth global demolition of species, *Etelaat Newspaper*, 93 (27291).

Dasgupta, P., 2007. Measuring Sustainable Development: Theory and Application. Asian Development Review, Vol. 24 (1), pp. 1-10.

Donkor, A.K., Nartey, V.K., Bonzongo, J.C. & Adotey, D. K. 2006. Artisanal mining of gold with mercury in Ghana, West Africa Journal of Applied Ecology (WAJAE), Vol. 9. Paper 2.

Dreschler, B. 2001. Small scale mining and sustainable development within the SADC region: *Mining Minerals and Sustainable Development. No. 84. England.*

Dümcke C. and Gnedovsky M. 2013. "The Social and Economic Value of Cultural Heritage: literature review", European Expert Network on Culture (EENC).

Dumcke. C and M. Gnedovsk. 2013. The Social and Economic Value of Cultural Heritage: literature review. European Expert Network on Culture (EENC).

Estelle L. A, Herlyn and Franz Josef Radermacher. (2014). "Sustainability: Challenges for the future". Sustainable entrepreneurship, Business success through sustainability, Springer, Germany.

Fuck. H and M. Wiggins. 2017. Climate Change, Heritage Policy and Practice in England: Risks and Opportunities, *Environmental Research, Strategic Research and Partnerships Team*, *Historic England*.

García-Canclini, N. (2016). Cultural heritage, identity and globalisation. Journal of Cultural Economy, 9(2), 205-211.

Geleta, M., 2020. Conservation Links and Gaps between Scientific Knowledge and Indigenous People. https://www.researchgate.net/publication/323736215. Accessed 14 March 2023

Giblin, J.D. 2014. Post-conflict heritage: symbolic healing and cultural renewal. *International Journal of Heritage Studies* 20(5).

Giliberto. F and S. Labadi. Francesca Giliberto & Sophia Labadi.2022. Harnessing cultural heritage for sustainable development: an analysis of three internationally funded projects in MENA Countries, *International Journal of Heritage Studies*, 28:2.

Gustafasson. B. E. 2011. The Meaning of Places through Stories: A Pedagogical Perspective. Museum International; the Social benefits of heritage, UNESCO.

Harrington, L. M. B. 2016. Sustainability theory and conceptual considerations: a review of key ideas for sustainability, and the rural context. *Papers in Applied Geography*. 2(4).

Heritage: Identifying and assessing ecosystem services and benefits provided by the world's most iconic natural places.

Holtorf, C. (2015). (Re)presenting mining heritage: A comparative analysis of museum practice in England and Germany. *International Journal of Heritage Studies*, 21(4), 329-342.

Holttorf. C. 2011. The Changing Contribution of Cultural Heritage to Society, *Museum International; The Social benefits of heritage, UNESCO*.

Inter-American Development Bank. (2020). Sustainability report 2019: From commitment to results. Retrieved from https://www.iadb.org/en/publications/sustainability-report-2019-commitment-results.

International Institute for Sustainable Development. 2022. Sustainable Development.

International Union for Conservation of Nature (IUCN). 2014. The Benefits of Natural World Koens, K., Postma, A., & Papp, B. (2018). Strategic heritage management and tourism. *Journal of Destination Marketing & Management*, 8, 36-45.

Kohler, N. M., & Strauss, B. (2019). *Building mining heritage*. Environmental Education Research, 25(6), 954-959.

Labadi. S. 2022. Rethinking Heritage for Sustainable Development, UCL PRESS.

Laladhas, K. P., Nilayangode, P. & Oommen V. 2018. Biodiversity for sustainable development. Springer, USA

Machat. C, M. Petzet and T. Ziesemer. 2014. Heritage at Risk World Report 2011-2013 on Monuments and Sites in Danger, International Council on Monuments and Sites (ICOMOS).

Macheka. M, T. 2015. Great Zimbabwe World Heritage Site and sustainable development, in *Journal of Cultural Heritage Management and Sustainable Development, Vol. 6 No. 3.*

Magidi, M. and Hlungwani, P.M., 2022. Development or destruction? Impacts of mining on the environment and rural livelihoods at Connemara Mine, Zimbabwe. *South African Geographical Journal*, pp.1-22.

Marais. L. 2011. Historic Environment Education and Time Travels: A Vehicle for Healing a Divided Society? *Museum International; The Social benefits of heritage, UNESCO*.

Martinez, G., Smith, N.M. and Malone, A., 2023. "I am formal, what comes next?": A proposed framework for achieving sustainable artisanal and small-scale mining formalization in Peru. *The Extractive Industries and Society*, *13*, p.101227.

Mbendera, K., Theu, R., & Let the WORLD Hear, M. S. K. (2018). *Heritage resources as a tool for sustainable development in Malawi*. Sustainable Development, 26(5), 536-545.

Melubo, K.; Lovelock, B. 2019. Living Inside a UNESCO World Heritage Site: The Perspective of the Maasai Community in Tanzania. *Tour. Plan Dev.* 16, 197–216.

Mudzengi. B, K., L Chapungu and S. Chiutsi. 2018. Challenges and Opportunities for 'little brothers' in the Tourism Sector Matrix: The Case of Local Communities around Great Zimbabwe National Monument, *African Journal of Hospitality, Tourism and Leisure, Volume 7 (3)*.

Muvhuti, M. R. and Musengi, T. G. (2019). National Archives of Zimbabwe: A Shield of Zimbabwe's Cultural Heritage. *International Journal of Information Science and Management* (*IJISM*), 3 (2), 29-42.

Mwania, P., & Rambo, C. M. (2019). Heritage resource conservation through culture and community-based tourism: An assessment of the Maasai Mara wildlife conservancies, Kenya. *Journal of Sustainable Tourism*, 27(11), 1199-1218.

National Culture Policy. (2007). Zimbabwe: *Ministry of Education, Sport, Arts and Culture*.

Retrieved from

https://www.unesco.org/culture/natlaws/media/pdf/zimbabwe/zimbabwe_nat_culture_policy_en_ 2007.pdf

Ndlovu-Gatsheni, S. J. (2015). Decoloniality as the Future of Heritage in Africa. *International Journal of Heritage Studies*, 21 (8), 786-797.

Nocca, F. The role of cultural heritage in sustainable development: Multidimensional indicators as Decision-Making tool. *Sustainability* 2017, 9.

Nomishan, T.S., Tubi, P.K. and Gubam, D.S., 2021. Cultural heritage management and the effect of corruption in Nigeria: hampering sustainable development via cultural heritage destruction. *Journal of Cultural Heritage Management and Sustainable Development*, (ahead-of-print).

Nyambiya. H and B. Mutyandaedza. 2019. Challenges of Managing Colonial Heritage in a Post-Colonial Era: A Case Study of Colonial Heritage in Harare, Zimbabwe, Journal of Sustainable Development in Africa, Volume 21, and No.4.

Nyirongo, J., & Caltran, G. (2014). The Role of Heritage Tourism in National Development: A Study of Zambia. Journal of Competitiveness, 6(1), 44-58.

Petzet, M., & Lipp, W. (2019). World heritage in Germany. Conservation, management and education. Monumente: *Magazine for Cultural Heritage in Germany*, (2), 1-9.

Phiri. S. 2011. Impact of artisanal small scale gold mining in Umzingwane District (Zimbabwe), a potential for ecological disaster, thesis submitted in partial fulfilment of the requirements for the degree in Masters in Disaster Management, University of Free State.

Society for International Development. 2021. Issues IN Development.

Tavingeyi. T. 2013. Community Participation and Education on Heritage Sites: A New Era of Collective Accountability in Zimbabwean Heritage Management Focusing On Musimbira Heritage Site, Bikita.

Thondhlana, T.P. and Machiridza, L.H. 2020. Restoration and Restitution of Cultural Heritage, the Case of the Ndebele Monarch: The Post-colonial Dilemma in Zimbabwe. *Journal of African Cultural Heritage Studies*, 2(1).

UNESCO. (2003). Convention for the Safeguarding of the Intangible Cultural Heritage. Retrieved from https://ich.unesco.org/en/convention

UNESCO. (2011). World heritage & sustainable development. Retrieved from: https://whc.unesco.org/en/sustainabledevelopment/.

Wambugu, J. N., Gikonyo, E. W., & Warui, C. M. (2020). Integrating cultural and natural heritage conservation in sustainable development strategies for Kenya. *World Journal of Tourism, Leisure and Sports*, *4*(1), 26-37.

Willis, K. J. (2014). Memorializing the Past in Zimbabwe: Memory Centers, Museums and National Monuments. *African Studies*, 73 (3), 408-426.

Winiwarter. V. 2015. The role of cultural heritage for the sustainable development of the Danube Region.

Zhang, M., & Fu, B. (2018). Heritage Cultural Tourism and Sustainable Development in China. Journal of Sustainable Tourism, 26(7), 889-906.

Appendix

Interview Guide for Community members and Artisanal miners

Benefits of the Site

- 1) What are the social and economic benefits that the heritage mining site brings to the surrounding communities?
- 2) In what ways does the use of the mining site enhance your cultural identity?
- 3) What are the environmental impacts of the heritage mining site on the surrounding communities?
- 4) Threats
- 5) What are the most significant threats to mining heritage sites?
- 6) What has been done to reduce such threats?
- 7) Contributions of NMMZ
- 8) How has this mining heritage site been managed and maintained by national museums and monuments?
- 9) To what extent have national museums and monuments been successful in protecting mining heritage sites from negative exploitation?
- 10) What are the current challenges faced by national museums and monuments in protecting mining heritage site? such as lack of funding, limited resources, or limited legal powers?

11) How can local communities be engaged in the safeguarding and preservation of heritage sites in a sustainable manner?

12) Measures

- 13) What policies and regulations can be put in place to ensure that there is sustainable developments?
- 14) What kind of education and awareness programs can be implemented to promote local ownership and appreciation of heritage sites for sustainable development?
- 15) How can the traditional knowledge and practices of local communities be integrated into the management and protection of local heritage sites?