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**Controversies and Challenges in Environmental
Reporting among Developing Economies: A Case of
Zimbabwe-listed Mining Companies**

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Abstract

Understanding of the context-based challenges in environmental reporting has become a key driver of the environmental sustainability agenda on the global stage. Despite numerous studies, the focus on environmental reporting in developing countries remains limited. This study employed a sequential exploratory research design. Initially, qualitative methods were employed, involving in-depth interviews with a total of 17 purposively selected participants from Zimbabwe-listed mining companies. Context-based constructs were

established and tested using quantitative methods where a sample of 400 respondents was randomly drawn from Zimbabwe's listed mining. Thematic analysis and SPSS were used to analyse the data. Findings indicate that there are inconsistencies in environmental reporting laws and regulations, inadequate financial resources, knowledge gaps, political interference, technological deficiencies, management-censored reporting, corruption and lack of support from management. Based on the findings of the study, it is recommended that developing economies have a contextualised and standardised environmental reporting system to ensure uniformity, comparability, and trustworthiness of environmental reports.

Keywords: *Zimbabwe Listed Mining Companies, Environmental Reporting, Challenges, Developing Economies, Environmental Management*

Introduction and Background

Environmental, Social and Governance (ESG) forms the foundation for sustainability in environmental management (Ramoetsi, 2025). This suggests that environmental management is an element of the ESG framework which aims to ensure that organisations understand their role in environmental management and attainment of Sustainable Development Goals (SDGs). According to Iredele and Tankiso (2020), there are limited studies on environmental management in developing economies; as a result, this undermines environmental sustainability. Despite the growing interest in environmental management, little attention has been paid to address the dearth of knowledge in developing countries like Zimbabwe.

Environmental reporting is a critical phenomenon in mining companies, and it has been one of the key non-financial reporting focus areas for investors and stakeholders over the years (Muchaendepi et al., 2019). This suggests that different stakeholder groups are increasingly interested in environmental reporting. This evidence confirms that interested groups get to assess corporate sustainability, ethical governance and risk associated with environmental management, which are significant drivers of the company's economic performance (Somjai, Fongtanakit & Laosillapacharoen, 2020).

Mining companies are among the highest contributors to environmental degradation and pollution (Denhere & Mhlanga, 2023). Therefore, this appears to suggest that the mining companies' participation in environmental reporting is imperative. However, environmental reporting in developing countries such as Zimbabwe has

been burdened by challenges (Iredele & Tankiso, 2020). Correspondingly, Mousavi, Varnamkhasti and Aghajani (2025) assert that environmental reporting in developing countries is characterised by controversies, and no clear path is followed on reporting. Ncube et al. (2025) argue that environmental reporting in most developing countries is voluntary; as a result, the appetite and willingness to report lie with the reporting institution. Myava (2019) revealed that mining companies from developing countries face challenges in reporting, and the challenges vary from country to country and industry. Thus, this paper focuses on establishing context-based challenges of environmental reporting in a developing country, Zimbabwe. Contemporary literature shows that environmental reporting by Zimbabwe-listed mining companies lacks consistency, clarity and contextualisation (Ncube et al., 2025).

Literature Review

The efficacy of environmental management and reporting is contingent upon several critical determinants, including organisational culture, managerial perceptions, and prevailing regulatory drivers (Du, Lu, Zhang & Li, 2025). Liu, Wang and Li (2018) argue that environmental reporting drivers are not without controversies and challenges. In an effort to address some of the challenges, different environmental management frameworks were developed, one after the other. Organisations such as the United Nations Environmental Programme (UNEP) and the World Commission on Environment and Development (WCED) are some of the global initiatives that pursue the promotion of sustainability and protection of the environment (Fuzi et al., 2019). Similarly, the United Nations Conference on Environment and Development (UNCED), which was held in Rio de Janeiro, Brazil, in 1992, provided strategies to address the adverse effects of human activities on the environment and encourage sustainable development (KaoDui, Muyun, & Mandella, 2019).

Furthermore, over the years, various measures have been implemented to mitigate the adverse effects of human activities on the natural environment (Liu, Wang & Li, 2018). For example, the following frameworks were also developed to increase awareness and management of the environment: Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), International Standard Organisation (ISO 14001: 2015), United Nations Sustainable Development Goals (UNSDG), and International Council for Mining and Metals (ICMM) are among other environmental reporting

frameworks. The frameworks not only increase awareness and management of the environment but also bring consistency and uniformity to environmental reporting (Hidayat, Abbas, Lam, & Sari, 2024).

Mining companies invest a significant amount of resources to deliver quality environmental reports, which small mining enterprises cannot do (KaoDui, Muyun & Mandella, 2019). One may contend that there is a positive relationship between the size of the organisation and environmental reporting. This is because some of the challenges faced by mining companies are financial resources and skilled personnel which small enterprises cannot fulfil. Adusei (2017) asserts that some mining companies lack the resources to come up with detailed and meaningful environmental reports that can be comparable to other mining companies.

Wang et al. (2018) assert that effective environmental reporting thrives when there is collaboration between departments where technical personnel, environmental officers, accountants, and other staff members share information. This suggests that environmental specialists who handle day-to-day environmental work together with accountants who handle financial data. It is worth noting that organisations will be better positioned to address environmental concerns by developing management strategies informed by meaningful stakeholder collaboration (Denhere & Mhlanga, 2023). Environmental reporting will continue to be a complicated process if the gap between environmental officers, technical staff, and accounting professionals is not addressed (Liu, Wang & Li, 2018).

Voluntary environmental reporting, unlike mandatory reporting, has remained subjective (Muza, 2018). Denhere and Mhlanga (2023) established that under voluntary reporting, companies may report selectively, excluding the information they deem unpleasant or reporting on areas they performed well because they are not obliged to report. This leaves the stakeholders exposed to manipulation as they do not have any legal base to compel the company to produce the environmental report. The standardisation of environmental reporting plays an essential role in increasing the quality and relevance of environmental reports (San & Heng, 2018).

Theoretical Framework

Stakeholder Theory

The stakeholder theory, according to Mu, Xu and Chen (2024), explains the business responsibility to the parties involved; these might be individuals or organisations like customers, workers, and shareholders. They could also be single or multiple stakeholders, and they may be supportive, marginal, or unsupportive. Thus, the goal of the stakeholder theory is to investigate the interaction between the organisation and its stakeholders. According to the stakeholder hypothesis, an organisation should interact with or answer to its stakeholders by giving them access to information that they believe is pertinent.

The stakeholder idea demonstrates how dependent businesses are on society (Trisnani & Aminah, 2024). This implies that the companies' operations are contingent upon obtaining and maintaining a social licence to operate from their local communities. The idea that companies maintain their survival through legitimacy or their relationship with society extends the understanding of whom companies must account to (Morrison, Aishamari & Finau, 2024). However, Dintimala and Amril (2018) dispute that companies owe their existence to society rather than owners or shareholders, as they are the source of their existence. Therefore, a business should refrain from adding another tax to its shareholders' income by acting as their proxy when making decisions that serve the interests of non-shareholders. Dintimala and Amril (2018) further argue that shareholders have the freedom to choose when to make contributions to society. However, Trisnani and Aminah (2024) contend that the ideas behind the stakeholder theory have changed over time and now encompass additional parties who might have an impact on or be impacted by a company's operations. The notion of the stakeholder theory has evolved to challenge the firm's shareholders' moral principles regarding their views on other stakeholders; it suggests that the company must look out for these stakeholders (Morrison et al., 2024). Thus, understanding context-based environmental reporting challenges is of significance.

Methods

The study adopted a pragmatism research philosophy, which encompasses an ontological and epistemological stance that supports the use of a mixed-methods approach to address the research objectives. The

mixed method was used because it integrates the qualitative and quantitative research methods (Saunders et al., 2019). Thus, the researcher was able to triangulate results for validity and explained the qualitative findings statistically. The study embraced a sequential exploratory research design. The technique allowed the study first to explore the research phenomenon using the qualitative approaches in the first phase and, in the second phase, to validate the constructs established through a qualitative study using the quantitative method.

The study population consisted of three stakeholder groups, namely managers, professionals, and technicians from the Zimbabwe-listed mining companies. These three groups were utilised because they had relevant information regarding environmental reporting. A purposive sampling technique was employed, and 17 in-depth interviews were conducted. The constructs established in the qualitative phase were validated through the factor analysis in the quantitative phase. A sample of 400 respondents was drawn from listed mining companies, and a 100% response rate was obtained. The qualitative data was analysed using Atlas.ti, and quantitative results were analysed using the SPSS software.

Results

Qualitative Results

The research aimed to explore the unique obstacles that hinder Zimbabwe-listed mining firms from implementing effective environmental disclosure, focusing on the local regulatory and socio-economic landscape. The study identified weak environmental reporting laws and regulations, inadequate allocation of financial resources, a knowledge gap between the regulator and the mining companies, political interference, technological deficiency, management-censored reporting, corruption, and lack of support from management.

Table 1.1 below displays the occupations of the participants in the study. This was important because the validity and reliability of data are based on how reliable the source of data is, among other reasons. To increase the reliability of the study, only personnel who have a link to environmental reporting within their organisations were interviewed. The participants' real names were not used in this study for some ethical reasons. Hence, the participants are identified as **P1**, **P2**, **P3** ...up to **P17**.

Table 1.1: Participants

Participants	Stakeholder group	Occupation	Sample
P1, P4, P5, P6, P7, P14, P15 & P16	Management	Operations Manager	8
		General Manager	
		Safety Health and Environment Manager	
		Chief Financial Officer	
P2, P3, P8, P9, P10, P11 & P13	Professionals	Safety Health and Environment Officer	7
		Geologist	
		Accountant	
P17, P12	Technicians	Mechanic, Machine Operator	2
Total sample			17

Source: *Author's own compilation (2025)*

Thematic Analysis

The researcher analysed data using thematic analysis because it provides rich, detailed and composite data. Naeem et al. (2023) assert that thematic analysis provides thick descriptive data. Caulfield (2019) suggests that a thematic description of the dataset assists the readers in getting a sagacity of the predominant and important themes. Hence, the study utilised thematic analysis techniques to align the primary data with the conceptual frameworks and descriptions established by previous scholars.

The process leading to the data analysis involved the collection of data using face-to-face interviews. The technique allowed the researcher to collect rich data and comprehend the social expressions of the participants and make follow-up questions to get clarity on contributions by participants, and the participants were also able to get clarity on questions that they did not understand. The interviews were audio recorded. Soon after the interviews, transcribing followed. This process involved listening to audio and changing it to verbatim, which ensured that the researcher familiarises with the data before coding could start. Braun and Clarke (2022) note that the researcher's involvement throughout the data collection process should enable the researcher to comprehend the data quickly and be able to recall the witness's facial expression as they were deliberating on a particular opinion.

During transcribing, the researcher reproduced all spoken words and sounds, including hesitations, false starts, cut-offs in speech, the interviewer's giggles, the mm-hmm's and ah-ha, laughter, long pauses, and strong emphasis made by the participants. This was adopted to

preserve a comprehensive and nuanced interpretation of the data extracts in their entirety. The researcher avoided the ‘cleaning up’ of the transcript by correcting grammar in order to avoid distorting data. However, there were insignificant corrections to the data, and it was only restricted to ensuring that the message communicated by the participants was understood. This approach to transcribing ensured that the data remained credible and reliable. Additionally, direct quotes from the participants were integrated to substantiate the themes, thereby enhancing the credibility and reliability of the study findings.

Figure 1.1 delineates the specific codes that informed the development of each overarching theme, providing a transparent audit trail of the qualitative analysis

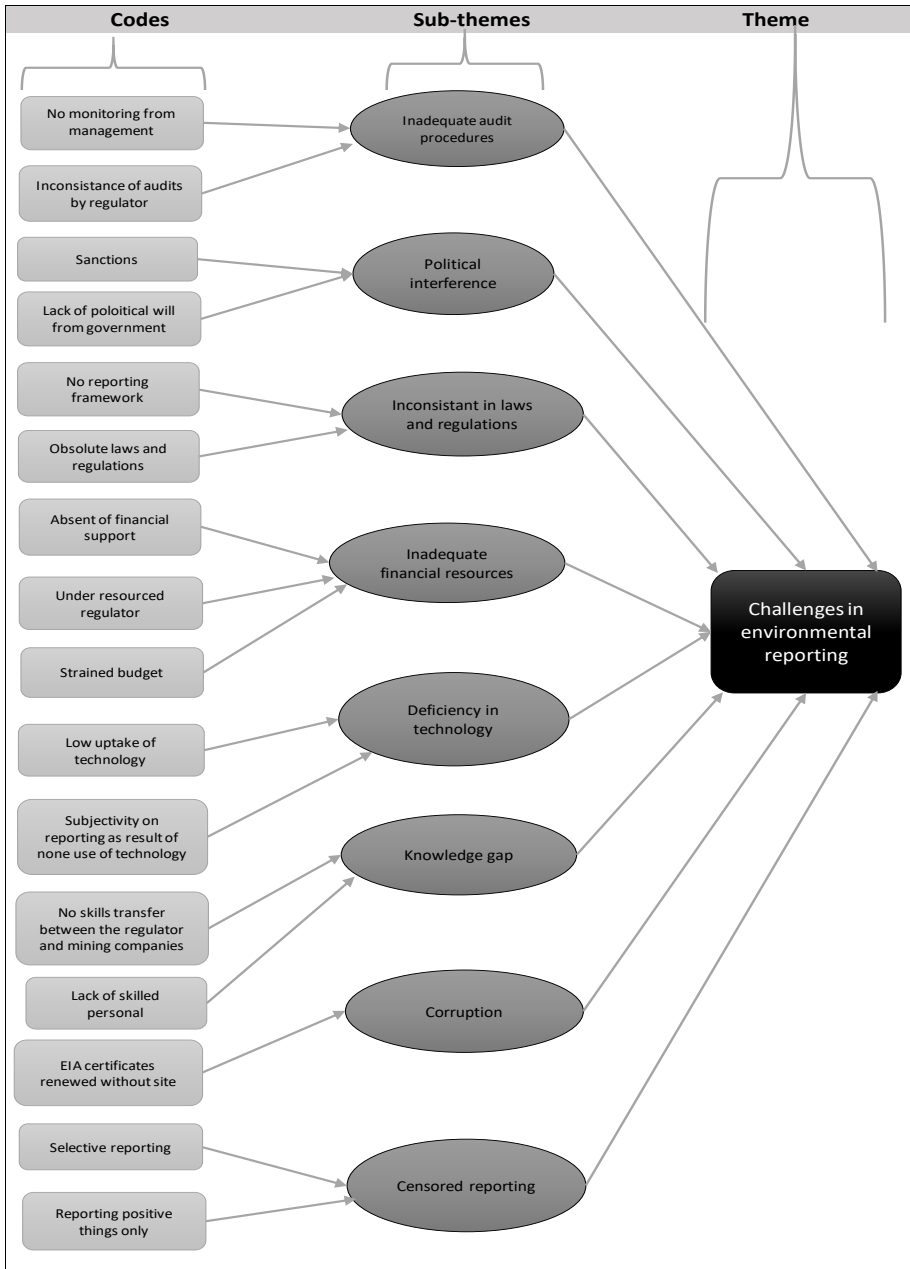


Figure 1.1: *Challenges in environmental reporting*

Source: *Author's own compilation (2025)*

Inadequate Audit Processes

According to participant **P3**, there is limited monitoring of mining activities related to environmental management and reporting. **P3** explained that management does not see value in spending financial resources on monitoring environmental management activities. In his own words, **P3** said, *“They are not prepared to devote financial resources for auditing”*. This was also supported by **P7**. **P7** said, *“Audits are important but we are currently generating very little income and our priority has been to steer up the business and increase income for our shareholders.”*

Muchaendepi et al. (2019) conducted a study on ‘challenges faced by the mining sector in implementing sustainable supply chain management in Zimbabwe.’ Muchaendepi et al. (2019) contend that management was not giving support to sustainability initiatives such as environmental audits, a catalyst of environmental management and reporting. The findings indicate a consistent pattern regarding management's attitude and behaviour towards environmental management initiatives.

Political Interference

The study also found that there was a lack of political will from the government to enforce environmental laws and regulations. This was testified to by **P3**, who said, *“The central government lacks the political will to prosecute the environmental offenders.”* Denhere and Mhlanga (2023) document that the supply chain management system has an influence on environmental management, as the companies that are not environmentally friendly find it difficult to trade in global markets. However, the study found that Zimbabwe mining companies are unable to trade in the global markets because of economic sanctions. As a result mining companies have failed to recognise any meaningful benefits of environmental reporting. According to **P8**, *“Mining companies do not have access to international markets where environmentally friendly mining is encouraged because of sanctions.”*

Inconsistency in Laws and Regulations

P1 mentioned that Zimbabwean mining companies use various environmental reporting frameworks. As a result, mining companies' environmental reports are uneven, costly, and difficult to navigate as various reporting frameworks are used. Unlike participant **P1**, **P7** was more elaborative and specific, mentioning that the Mines and Minerals

Act of 1961 is old and outdated, as it fails to be compatible with current trends in environmental reporting. This view was consistent with the view of the Crisis Group Africa Report (2020) that Zimbabwe should review its Mines and Minerals Acts because it misses some critical factors in mining, such as climate change. Muchaendepi et al. (2019) explain that the government of Zimbabwe needs to improve its legal and regulatory framework for environmental reporting. Taruvinga et al. (2016) assert that the environmental legislation is fragmented, incomplete, uncoordinated and based on a sectorial approach, and it does not cover environmental protection. **P7** said, *"We have mining laws that have been amended, but they have taken a long time to be published. This affects reporting because the current Mines and Minerals Act of 1961 is old and outdated."*

Knowledge Gap

The study established that there is a knowledge gap between the regulator and the mining companies. **P1** links the knowledge gap to inadequate financial resources, which have led to EMA failing to retain knowledgeable and skilled workers. **P1** said, *"In terms of skills and technical expertise, there is a gap, and there has not been any address to having EMA come to mining houses."* Another participant, **P14**, indicated that the environmental management and reporting position of the regulator is not effectively communicated to mining companies and the general public.

Inadequate Financial Resources

According to Osemene, Adinnu, Fagbemi, and Olowookere (2024), EMA does not receive adequate funding from the government to execute its mandate. Participant **P9** mentioned that inadequate financial resources pose challenges in environmental reporting in mining companies as they affect the quality of environmental management and reports. **P9** explained that a poorly financed company lacks the capacity to hire qualified personnel to do environmental reporting. In his own words, **P9** said, *"There are challenges that relate to financial problems. The company should have resources and qualified personnel to produce proper environmental reports."* Additionally, **P9** said, *"Environmental reporting is regarded as an unnecessary cost. This is because management does not see value in it."* Osemene et al. (2024) argue that environmental reporting has no clear financial return on investment. As a result, management allocates insignificant resources to environmental reporting. Therefore, it can be

deduced that there is a dearth of knowledge regarding environmental reporting within the sector.

Technological Deficiency

A study by Simone et al. (2023) shows that the use of technological platforms can lead to a detailed, analytic evaluation and accurate disclosure of environmental information. This implies that the lack of technological means of environmental reporting compromises the quality of environmental reports in the mining companies. One participant, **P11**, had this to say: *“The Zimbabwe mining companies are lagging behind on technology required to conduct or generate environmental reports.”* In agreement with **P11**, **P1** mentioned that they are faced with the challenge of not having a computerised environmental reporting system, which has led to data being easily manipulated. **P1** said: *“So, I was saying the challenge is that we do not have a computer system that we can use to generate environmental reports.”*

Corruption

The study established that corruption hinders effective environmental management and reporting in Zimbabwe-listed mining companies. An account provided by **P2** suggests that EMA officials accept bribes from defaulting companies as a means of evading penalties. According to **P2**: *“.... The companies just pay bribes so they can get away with serious environmental issues.”* In support of **P2**, **P10** had this to say: *“.... they take bribes and leave the company damaging the environment.”*

Censored Reporting

Saeed, Mohammed, Kumari, and Pandey (2025) indicate that it is common to have a set of data censored, especially when the environmental measurements are below the detection limit. This implies that a degree of censorship is considered tolerable in instances where the resulting modifications are deemed insignificant. Participant **P9** explained that management has the influence of determining how reporting should be done. This has proven to compromise information, as some of the information being reported is inaccurate. **P9** noted, *“Sometimes management would censor information before it is publicised, removing what they do not desire the public to know. This is the challenge we face as social, health and environmental officers.”*

Summary of Qualitative Findings on Challenges of Environmental Reporting

Taking everything into account, it can be inferred that the challenges faced by Zimbabwe-listed mining companies align with the findings of Nguyen (2022), which identified a lack of managerial commitment, poor stakeholder engagement, and the absence of a standardised system for environmental reporting. However, in this study, additional challenges were identified, which are context-based and include corruption, political interferences, the knowledge gap between the regulator and mining companies, technological deficiencies, censored reporting, and inadequate financial resources.

Quantitative results

The study captured the demographic information of respondents, including their level of education, work experience, job position, and employment status. The demographic information was part of the independent variables of the data collection instrument administered to purposefully selected accountants, artisans, assemblers or operators; engineers; finance managers; metallurgists; mine surveyors; operations managers; technicians; and safety, health and environment officers of Zimbabwe's listed mining companies.

Highest Level of Education

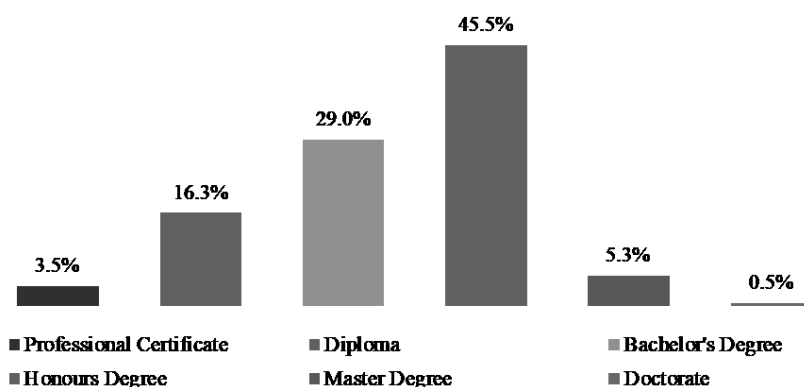


Figure 1.2: Highest level of education attained

Source: Author's own compilation (2025)

Figure 1.2 above depicts the distribution of respondents using statistical frequencies. The figure shows the highest level of education attained by the respondents. The majority of the respondents, 45.5%, indicated that they are honours degree graduates; 29% mentioned that they are bachelor's degree holders; 16.3% have graduated with diplomas; 5.3% are master's degree graduates; 3.5% are holders of professional certificates; and finally, 0.5% are PhD holders. The number of graduates who participated in this study indicates that respondents are knowledgeable professionals in the mining industry.

The level of education of respondents enhances both the reliability and the validity of the research findings Mpofu (2021) mentions that the levels of education of respondents have a bearing on the reliability and validity of the study. The results revealed that the majority of employees who occupy professional positions are either holders of honours or bachelor's degrees. It was also interesting to observe that PhD holders hold some positions. According to Machera (2020), PhD holders mostly occupy university posts, and those found in the industry are merely there to gain industry experience. The study also revealed that some employees are holders of professional certificates. This could imply that they joined the industry as labourers and eventually attained certificates that allowed them to grow within the ranks of the industry to occupy key posts. The number of employees with diplomas and degrees is an indication that mining companies employ both technical college and university students. This is because most universities issue degrees, while technical colleges issue diplomas.

Employment Status

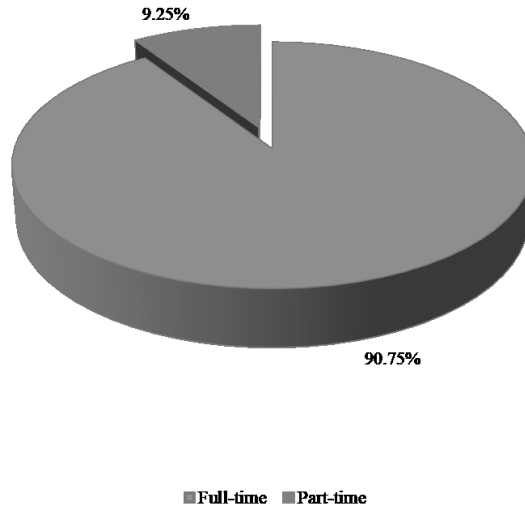


Figure 1.3: Employment status

Source: *Author's own compilation (2025)*

The distribution of employment status was measured using the statistical frequencies as shown in Figure 1.3. The results show that 90.75% of respondents were in full-time employment, while 9.25% of respondents were in part-time employment. Prior studies indicate that mining companies employ a substantial volume of both full-time and part-time labour. The lower numbers of part-time employees indicate that part-time employment tends to be seasonal and is much concentrated on unskilled labour. Mpofu (2021) notes that employment in the mining industry is seasonal, which makes the number of part-time employees fluctuate regularly. The study revealed that professional positions in the mining industry are occupied mostly by full-time employees. Understanding the employment status of personnel assisted the study in determining whether the organisation's operations were permanent or short-term, thereby circumventing the need for a direct inquiry. The study concludes that the higher the number of full-time employees, the more committed the company is to long-term goals. According to Myava (2019), environmental sustainability goals are long-term, and companies that commit are those with long-term plans. One of the characteristics of such companies is the higher number of full-time employees.

Job position

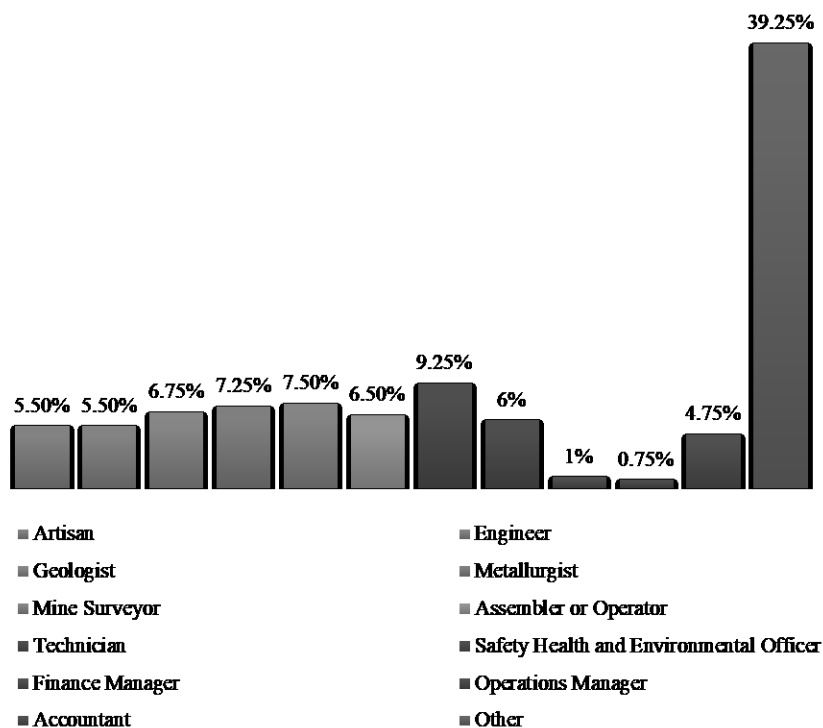


Figure 1.4: Job Position

Source: Author's own compilation, (2025)

Figure 1.4 shows the frequency of responses by positions occupied by respondents in the Zimbabwe-listed mining companies. A total of 9.25% were technicians, 7.5% were mine surveyors, 7.25% were metallurgists, 6.75% were geologists, and 6% were safety, health and environmental officers; 5.5% were artisans, 5.5% were engineers, and 4.75% were accountants; 1% were finance managers; and 0.75% were operations managers and a total of 39.25% of respondents were defined as 'other'. This group included company CEOs, CFOs, marketing professionals, human resource professionals and accounting and finance department personnel. The respondents' distribution shows a fair mix of professionals with different job experiences. This allowed the study to avoid departmental bias and tap into the rich experience of various professionals on environmental reporting across the mining companies.

It is also important to note that the study accommodated different professionals within the mining companies. Matashu (2016) avers that the balance in the respondents' positions enhances the validity of the responses. Therefore, the diverse respondents mean the data was more representative of the study population, leading to improved data validity and reliability.

Work Experience

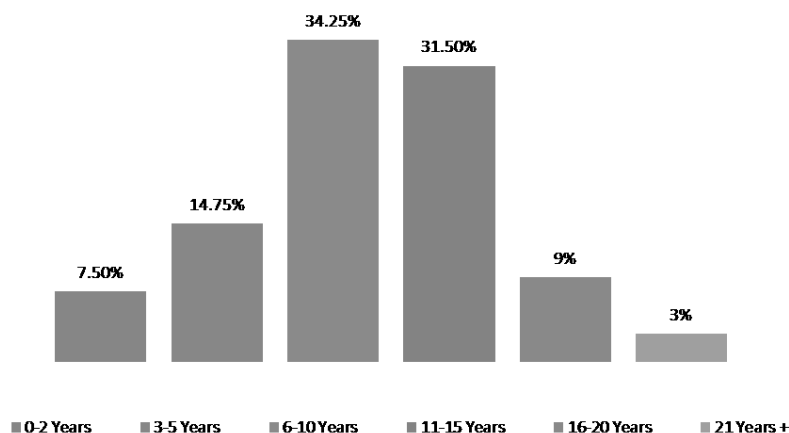


Figure 1.5: Work experience

Source: *Author's own compilation (2025)*

Figure 1.5 shows the work experience of respondents in the study. The majority of respondents had between 6 and 10 years of experience, representing 34.25%, which was followed by 11-15 years at 31.5%, while the 3-5 years had 14.75%, the 16-20 years 9%, the 0-2 years a 7.5% and, finally, the 21 years and above had 3%. The more experience the respondents had, the more informative they were. This improved the reliability of the results. In this study, the majority of respondents had experience above 6 years, accounting for over 77% of the respondents. This implies that the respondents of the study were well-experienced and informed personnel. This suggests that the findings of the study were derived from experienced and informed personnel. Consequently, it can be concluded that the results are based on reliable and highly knowledgeable sources.

The figure 1.6 below depicts the quantitative results of the study. Figure 1.6 shows the perception of the respondents on each of the identified variables (challenges) faced by Zimbabwe-listed mining companies on environmental reporting.

Challenges in Environmental Reporting Faced by Zimbabwe-Listed Companies

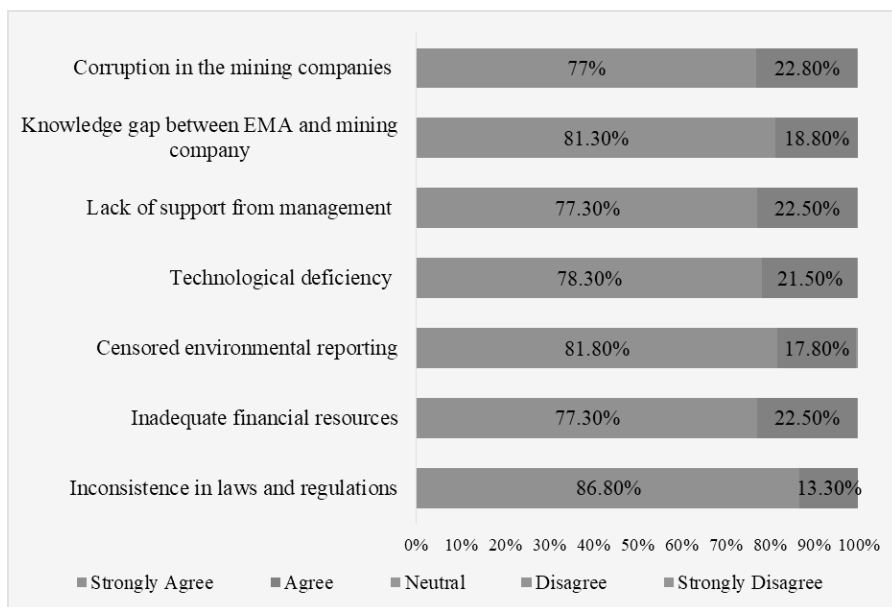


Figure 1.6: Challenges in environmental reporting faced by Zimbabwe-listed companies

Source: Author's own compilation (2025)

The study sought to understand the challenges faced by the listed mining companies in Zimbabwe in terms of environmental reporting. Consequently, some variables identified during the qualitative phase of the study were subjected to empirical testing. The respondents were asked if they were in consensus with the view that corruption in the mining companies is one of the challenges: 77% of respondents strongly agree, 22.8% agree, and 0.3% of the respondents were neutral. This means that there was a consensus that corruption was one of the challenges affecting environmental reporting in the listed mining companies in Zimbabwe.

The respondents were also asked to share their views on the notion that the knowledge gap between EMA and mining companies was a challenge that affected environmental reporting in listed Zimbabwe mining companies. About 81.3% of respondents strongly agree, and 18.8% agree that the knowledge gap between EMA and mining companies was indeed a challenge.

The study established that about 77.3% of respondents strongly agree and 22.5% agree that lack of support from management was a challenge that affected environmental reporting, and 0.3% were neutral; that is, they neither agree nor disagree with the view. Since a majority of respondents identified a lack of management support as a significant obstacle, the study concludes that this is a critical barrier to effective environmental reporting. Furthermore, technological deficiency was assessed as one of the key challenges during the investigation. A total of 78.3% of respondents strongly agree, and 21.5% agree that technology deficiency was a challenge in environmental reporting. At the same time, 0.3% of respondents were neutral. The study observed that most respondents were of the opinion that technological deficiency had a negative effect on environmental reporting.

The study's initial phase identified censored environmental reporting as a primary challenge. The second phase of the study sought to understand from a larger sample using the quantitative method whether censored reporting was a challenge. Over 81.8% of respondents strongly agree, 17.8% agree that censored environmental reporting was a challenge, and 0.5% were neutral as they could not either agree or disagree.

Inadequate financial resources were found to be one of the critical challenges faced by mining companies in environmental reporting. A total of 77.3% of respondents strongly agree, and 22.5% agree that inadequate financial resources are a challenge in environmental reporting. On the contrary, about 0.3% of respondents strongly disagree that insufficient financial resources can be a challenge to environmental reporting. The majority of respondents are of the opinion that inadequacy of financial resources has had a negative effect on environmental reporting in Zimbabwe-listed mining companies.

The study discovered that 86.8% of respondents strongly agreed that inconsistency in laws and regulations was a challenge in environmental reporting among Zimbabwe-listed mining companies. A total of 13.3% of respondents agree with the notion that inconsistency in laws and regulations brought challenges to environmental reporting.

Mean And Standard Deviation

Table 1.2 below presents the percentage of respondents who strongly agreed that each listed factor constitutes a challenge to environmental reporting among Zimbabwe-listed mining companies.

Table 1.2: Mean and standard deviation

Challenges	Strongly agree (%)
Corruption	77%
Knowledge gap (EMA vs. mining companies)	81.30%
Lack of management support	77.30%
Technological deficiency	78.30%
Censored environmental reporting	81.80%
Inadequate financial resources	77.30%
Inconsistency in laws and regulations	86.80%
Mean	79.97%
Standard Deviation	3.33%

Source: Author's own compilation (2025)

The respondents who strongly agreed with the challenges faced by the listed had a mean of 79.97%, and the standard deviation is 3.33%. This suggests a broad consensus among the respondents that the identified challenges exert a significant influence on environmental reporting practices. The high mean also increases the validity and credibility of the results, as it shows that the majority of respondents agree that the challenges are significant in environmental reporting. The low percentage of the standard deviation shows that there is very little variation, and the respondents consider the challenges of very important environmental reporting.

Recommendations

Based on the findings of the study, it is recommended that Zimbabwe-listed mining companies have a contextualised and standardised environmental reporting system to ensure the uniformity, comparability, and trustworthiness of their reports. Additionally, South African environmental reporting frameworks can be used as a benchmark. Furthermore, the study recommends that regular environmental

management audits be conducted by both regulatory bodies and independent organisations. Audits must be undertaken to ensure that companies comply with local and international environmental laws. EMA should have clear guidelines and mechanisms to enforce consistency in environmental reporting. Third-party verification by audit companies is recommended because it increases the reliability of the environmental report.

Conclusions

The findings of the study show a multifaceted array of challenges impeding effective environmental reporting. Collectively, the study concluded that corruption, a lack of understanding between mining companies and the Environmental Management Agency (EMA), and inadequate management support for environmental and technological issues are some of the challenges. Lastly, other challenges faced include censored environmental reporting, insufficient funding for environmental management and reporting, and contradictions in the laws and regulations controlling environmental reporting. Given these challenges, the study concludes that a bespoke, contextualised framework is essential to improve the effectiveness of environmental reporting, ensuring that both domestic regulatory requirements and internal organisational hurdles are adequately addressed.

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