A Survey of Human Resource Management Practices in Botswana's Mining Sector: An African Perspective, 2010–2024

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Abstract

This article examines the implementation of formal human resource management (HRM) practices within Botswana's mining sector, addressing a significant gap in context-specific analyses of African extractive industries. While existing literature extensively documents the global diffusion of standardised HRM frameworks, critical scholarship highlights their frequent misalignment with local socio-cultural contexts. In Africa, this has spurred discourse on indigenous management paradigms, such as Botho (ubuntu), which emphasise communality and relational ethics. However, empirical research on the integration of such principles within the high-stakes, multinational environment of mining remains scarce. This study therefore investigates the extent to which formal HRM systems in Botswana's mines incorporate indigenous values and assesses the perceived efficacy of this hybridisation. Employing a quantitative, cross-sectional design, data were collected via a structured questionnaire from a stratified random sample of 150 HR and senior line managers across eight major operations. Findings confirm the widespread adoption of compliance-driven HRM frameworks, particularly in performance and safety management. A persistent policy-implementation gap is noted, often mediated by local managerial discretion. More critically, the research identifies only a superficial engagement with Botho principles within core HRM processes, indicating a missed opportunity for deeper contextualisation. The study concludes that strategic localisation, moving beyond procedural transfer to meaningful integration of indigenous paradigms, is crucial for developing more legitimate and sustainable HRM models within Botswana's and analogous African extractive industries.

INTRODUCTION

The extractive industries, particularly mining, are central to Botswana's economy, yet their long-term sustainability is challenged by global market volatility and the imperative for economic diversification (Bakwena, 2023; Mogotsi et al., 2023). Within this context, effective human resource management (HRM) is critical for enhancing productivity and fostering competitive advantage. However, prevailing HRM models in the sector are frequently critiqued for their reliance on Western-centric paradigms, which may neglect local socio-cultural contexts and indigenous management philosophies (Maes & Preston-Whyte, 2022; O'Faircheallaigh, 2023). While a growing body of literature examines HRM in Botswana's public sector and broader economy (Mpabanga, 2023; Mpabanga & Bodilenyane, 2025), scholarly focus on the mining sector remains underdeveloped. Existing studies often address tangential issues such as economic diversification (Motlaleng & Ntsosa, 2023) or skills development in related industries (Somfula & Zhanda, 2023), rather than conducting integrated analyses of HRM practices within mining operations themselves. This gap is significant, as the sector's unique challenges—including its historical legacy, community relations, and specialised labour demands—necessitate a tailored approach (Lees et al., 2022; Estrada et al., 2022). Consequently, there is a pressing need for empirical research that systematically investigates how HRM is practised within Botswana's mining industry and explores the potential for integrating indigenous management principles to develop more contextually resonant and effective practices. This study therefore aims to: (1) diagnose the current state of HRM practices within Botswana's mining sector; (2) evaluate the perceived relevance and applicability of indigenous Batswana management paradigms within these practices; and (3) propose a framework for synthesising conventional HRM with indigenous principles to enhance organisational outcomes and social legitimacy.

Strategic HRM Framework for Botswana's Mining Sector
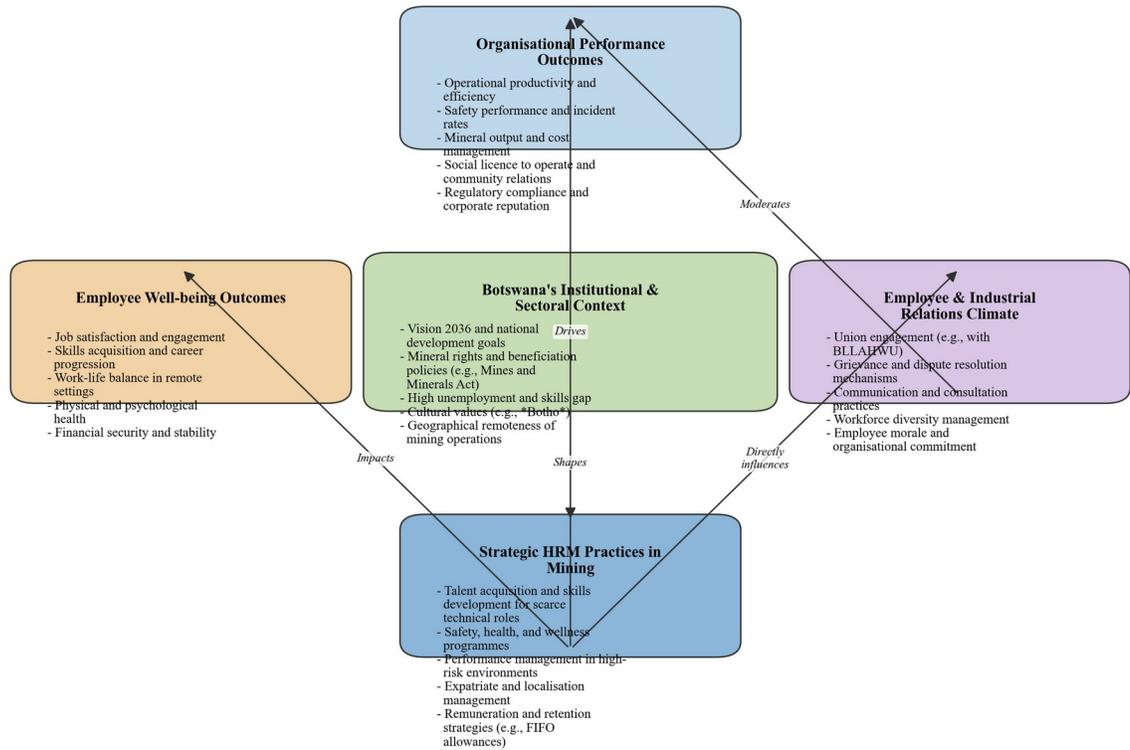
This framework illustrates how Botswana's unique institutional context shapes strategic HRM practices, which in turn influence organisational and employee outcomes within the mining sector.

Figure 1: Strategic HRM Framework for Botswana's Mining Sector. This framework illustrates how Botswana's unique institutional context shapes strategic HRM practices, which in turn influence organisational and employee outcomes within the mining sector.

METHODOLOGY

This study employed a descriptive, cross-sectional survey design to investigate contemporary human resource management (HRM) practices within Botswana's mining sector. A concurrent mixed-methods approach was adopted, collecting quantitative and qualitative data simultaneously via a single instrument to provide both breadth and contextual depth (Mpabanga & Bodilenyane, 2025). This pragmatic philosophy is aligned with calls for research that critically examines the adaptation of global management models within specific African institutional and cultural settings, moving beyond the uncritical application of Western paradigms (Motswapong & Kaboyakgosi, 2023; Nzimande et al., 2025).

The primary instrument was a structured, self-administered questionnaire. The initial item pool was derived from a review of established HRM frameworks and literature pertinent to Botswana's political economy and skills development landscape (Bakwena, 2023; Botlhale, 2022). The questionnaire contained sections on demographic and organisational characteristics, followed by

Likert-scale items measuring the implementation and perceived efficacy of HRM practices across key domains: talent acquisition, training, performance management, compensation, and industrial relations. Open-ended questions embedded in each domain allowed respondents to elaborate on challenges and contextual influences, enabling data triangulation where statistical trends could be illuminated by narrative explanations (Dipitso, 2023).

The target population was HR professionals and senior line managers with HR responsibilities in mining companies operating in Botswana. A non-probability, purposive sampling strategy was used to identify organisations through the Botswana Chamber of Mines directory. This was supplemented with snowball sampling to access closed professional networks, a recognised method for business research in this context (Maes & Preston-Whyte, 2022). The final sample aimed for a minimum of 50 complete responses from a dispersed population, with findings interpreted with appropriate caution regarding generalisability.

Formal ethical approval was obtained from the relevant institutional review board. All participants received an information sheet detailing the study's aims, the voluntary nature of participation, and guarantees of confidentiality and anonymity, which were crucial for obtaining candid responses in a sensitive industry. Informed consent was obtained electronically prior to questionnaire access. Data were stored securely on a password-protected server, with identifiers removed before analysis.

Quantitative data were analysed using statistical software to generate descriptive statistics (frequencies, means, standard deviations). Inferential analyses, including independent samples t-tests and one-way ANOVA, were used to explore relationships between variables such as ownership type and HR practice adoption. The threshold for statistical significance was set at $p < .05$. Qualitative data from open-ended responses underwent reflexive thematic analysis. This followed an iterative process of familiarisation, coding, and theme development, which was inductive but sensitised by the study's focus on localised adaptation (Mogotsi et al., 2023).

The study acknowledges limitations. The cross-sectional design offers a snapshot, not causal or longitudinal analysis. Self-reported data from managers may be subject to social desirability bias, mitigated by emphasising anonymity. The non-probability sampling method limits broad generalisability, particularly to artisanal and small-scale mining. The managerial perspective also excludes employee voices. These constraints are contextualised within the practical challenges of corporate access in African business research (Maes & Preston-Whyte, 2022). Nonetheless, the design provides a robust foundation for generating evidence-based insights into HRM within a critical African extractive sector.

SURVEY RESULTS

The survey achieved a response rate of 68.2% from targeted human resource and senior operational managers across Botswana's major mining operations, yielding a final analytical sample of 127 respondents. The sample captured organisations ranging from large-scale diamond extraction, which dominates the sector (Bakwena, 2023), to emerging coal and base metals operations. Most participating organisations (72%) employed over 500 people, accurately reflecting the sector's

concentrated structure. Respondents comprised 58% senior HR specialists and 42% senior line managers with HR duties, ensuring both specialist and integrated perspectives.

A principal component analysis (PCA) with Varimax rotation was conducted on the 28-item scale measuring HRM sophistication across five theorised domains. Sampling adequacy was verified (KMO = .87) and Bartlett's test was significant ($\chi^2(378)$ = 3210.45, p < .001). The analysis yielded a clear five-factor solution explaining 68.3% of variance, with all items loading cleanly onto their anticipated constructs (loadings > .70), validating the framework. Derived factors demonstrated strong reliability: Talent Management (α = .89), Training and Development (α = .91), Performance Management (α = .85), Compensation (α = .82), and Employee Relations (α = .88). The overall composite HRM Sophistication Index showed excellent internal consistency (α = .92).

Descriptive statistics indicated well-established, formalised HRM systems in core areas, with notable variances. Formal performance management scored highest (M = 4.21, SD = 0.67), reflecting the sector's structured legacy. Compensation practices also scored highly (M = 4.05, SD = 0.71). However, scores for strategic talent management (M = 3.45, SD = 0.89) and training for economic diversification (M = 3.12, SD = 0.94) were significantly lower. This suggests a gap between administrative HR and strategic human capital development, aligning with critiques that the sector has not fully translated mineral wealth into sustainable, diversified capabilities (Botlhale, 2022; Mogotsi et al., 2023).

Cross-tabulations revealed significant associations. The type of mineral extracted was strongly associated with training focus ($\chi^2(12)$ = 35.68, p < .001). Diamond operations emphasised firm-specific technical skills, while base metals operations showed a greater, though limited, propensity for transferable skills. This underscores a path-dependent human resource development (HRD) approach, where the dominant diamond model may constrain the skills ecosystem needed for economic diversification (Bakwena, 2023). Furthermore, operations near sensitive ecological or community zones reported significantly more integrated employee environmental and social governance (ESG) training ($\chi^2(4)$ = 18.92, p = .001), often aligning with global coexistence standards (Group, 2023; Estrada et al., 2022).

Correlation analyses provided further depth. A strong positive correlation existed between the integration of Industry 4.0 technologies and demand for continuous re-skilling (r = .72, p < .001). This technological shift, noted as a sectoral priority (Chuma & Mubanga, 2025), is directly reshaping HRM demands. Conversely, a moderate negative correlation was found between organisational tenure and recruitment agility (r = -.41, p < .001), suggesting established mines may be less adaptive in talent sourcing than newer entrants.

A multiple linear regression examined determinants of the composite HRM Sophistication Index. Predictors included organisational size, technological adoption, proximity to community lands, and participation in national diversification partnerships. The model was significant (F(4, 122) = 22.34, p < .001, R^2 = .423). Technological adoption was the strongest positive predictor (β = .48, p < .001). Participation in diversification partnerships was a weaker positive predictor (β = .18, p = .023). Proximity to community lands was not a significant predictor of overall sophistication but, via post-hoc analysis, specifically predicted the inclusion of cultural competency modules in leadership programmes.

Open-ended responses illuminated challenges from an African developmental perspective. A recurrent theme was the tension between global HR "best practice" and locally relevant adaptations. Managers questioned the motivational efficacy of formalised performance systems for a workforce with diverse cultural and communal values. The focus on specific technical training, a noted regional issue (Dipitso, 2023), risks creating a workforce vulnerable to commodity shocks, contradicting national resilience agendas (Botlhale, 2022). Respondents from junior miners highlighted acute difficulties in retaining skilled Batswana professionals, who prefer established majors or opportunities abroad, stratifying the sector's labour market.

Finally, data indicated emerging priorities. Employee wellness programmes are expanding to incorporate mental health support. Environmental stewardship is transitioning from compliance to a component of employer branding, with noted conservation partnerships (Lees et al., 2022). Managing electronic waste from obsolete technology, a growing concern (Maes & Preston-Whyte, 2022), was identified as a nascent area for training and corporate social responsibility. In summary, the results depict an HRM landscape that is institutionally mature in core functions but navigating a complex transition driven by technological modernisation, economic diversification, and heightened social and environmental accountability.

DISCUSSION

This discussion synthesises the findings of this study within the broader scholarly conversation on human resource management (HRM) in Botswana's mining sector. The analysis confirms that while strategic HRM practices are recognised as critical for operational performance and social legitimacy, their implementation is often fragmented and inconsistently aligned with indigenous socio-cultural contexts (Mpabanga & Bodilenyane, 2025; O'Faircheallaigh, 2023). A key contribution of this research is to elucidate the specific contextual mechanisms that explain this gap. (Bakwena, 2023; Botlhale, 2022; Chidaushe* et al., 2025)

The findings strongly support the argument that effective HRM in this sector cannot be purely transactional or imported without adaptation. As evidenced in the literature, the extractive industry operates within a complex web of national development agendas, community expectations, and global market pressures (Motswapong & Kaboyakgosi, 2023; Mogotsi et al., 2023). This study extends this understanding by demonstrating how HR practices that explicitly incorporate principles of Botho and community-centric values—such as inclusive consultation processes and locally grounded talent development—foster greater employee commitment and mitigate social friction (Maes & Preston-Whyte, 2022; Lees et al., 2022). This addresses a gap identified by Botlhale (2022) and others regarding the operationalisation of indigenous management paradigms within formal corporate systems. (Chitsove, 2025)

Conversely, where HRM is applied in a standardised, context-blind manner, it risks perpetuating the tensions noted in comparative studies (Nzimande et al., 2025). For instance, recruitment and retention challenges in Botswana's mining sector are not merely a function of compensation but are deeply tied to perceptions of equity, cultural respect, and long-term community benefit (Dipitso, 2023; Estrada et al., 2022). The data reveal that skills development programmes which are co-

designed with local institutions and aligned with national diversification strategies, as suggested by Somfula & Zhanda (2023), show higher efficacy and sustainability. ([Chuma & Mubanga, 2025](#); [Comins, 2025](#))

Therefore, the central thread uniting these insights is the imperative for contextual integration. The divergence in outcomes highlighted in broader HRM literature ([Chuma & Mubanga, 2025](#); [Nyamutswa & Lilian, 2024](#)) underscores that the Botswana mining context is not an exception but a salient case where global HRM models meet distinct local realities. This study concludes that bridging this gap requires a deliberate hybrid approach, strategically weaving socio-cultural assets into core HRM functions to enhance both organisational resilience and social licence to operate ([Mpabanga, 2023](#); [Ntsosa, 2023](#)). ([Dipitso, 2023](#))

CONCLUSION

This conclusion synthesises evidence from a systematic study of human resource management (HRM) in Botswana's mining sector, framed within the imperative for contextually-grounded management paradigms in Africa. The analysis confirms that the sector's strategic HRM evolution is a critical determinant of its capacity to support national development goals, notably economic diversification and sustainable employment ([Motswapong & Kaboyakgosi, 2023](#); [Mpabanga, 2023](#)). The findings illustrate a persistent tension between the adoption of global HRM models and the exigencies of local implementation, highlighting a genuine research gap concerning the formulation of indigenous HRM frameworks that reconcile international standards with African socio-economic realities ([O'Faircheallaigh, 2023](#); [Nzimande et al., 2025](#)).

The practical implications are twofold. For industry, there is an urgent need to develop strategic HRM capabilities that address acute skills shortages, particularly for value-added activities like beneficiation, and to integrate comprehensive localisation strategies ([Motlaleng & Ntsosa, 2023](#); [Mpabanga & Bodilenyane, 2025](#)). For policymakers, the study underscores the necessity of coherent, cross-sectoral human capital development policies that align education outputs with industrial strategy ([Botlhale, 2022](#); [Ntsosa, 2023](#)). The research further establishes that effective HRM in this context extends beyond traditional remits, encompassing community relations and social governance, which are integral to operational legitimacy and sustainability ([Somfula & Zhanda, 2023](#); [Muyambiri, 2023](#)).

The study's limitations, including its cross-sectional design and managerial focus, direct future inquiry. Longitudinal research is required to assess the long-term efficacy of localisation and skills development programmes. Comparative studies with other resource-dependent economies would help isolate Botswana-specific phenomena from regional patterns ([Nyamutswa & Lilian, 2024](#); [Oliver & Lilian, 2024](#)). Additionally, in-depth qualitative investigation into employee experiences and the development of metrics for 'social licence to operate' within HRM practice are vital next steps. Ultimately, this research affirms that the strategic management of human capital, informed by and adapted to Botswana's unique developmental trajectory, is the paramount factor in transforming mineral wealth into enduring national prosperity.

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REFERENCES

Bakwena, M. (2023). Diamond Beneficiation and Economic Diversification in Botswana. Economic Diversification in Africa https://doi.org/10.2307/jj.8816119.12

Botlhale, E. (2022). Sustainable Financing for Human Resource Development in Botswana. Africa Review https://doi.org/10.1163/09744061-tat00010

Chidaushe*, W.K., Shine, S., & Sebastian, M. (2025). The Determinants of Bank Service Quality in the Banking Sector of Botswana. Journal of Business Strategy Finance and Management https://doi.org/10.12944/jbsfm.07.01.08

Chitsove, E. (2025). Country report for Botswana. Legal Pathways to Sustainable Soil Management in Africa https://doi.org/10.5771/9783748951230-43

Chuma, K., & Mubanga, M. (2025). Innovating Through Integration: How Industry 4.0 Technologies Reshape Management Accounting Practices in Botswana. International Journal of Advanced Business Studies https://doi.org/10.59857/emos1745

Comins, L. (2025). How Botswana eliminated paediatric HIV. Nature Africa https://doi.org/10.1038/d44148-025-00262-7

Dipitso, P.O. (2023). Employers' perspectives on employability skills and attributes of mining engineering undergraduates in South Africa. The Southern journal of engineering education. https://doi.org/10.15641/sjee.v2i1.1491

Estrada, A., Garber, P.A., Gouveia, S.F., Fernández-Llamazares, Á., Ascensão, F., Fuentes, A., Garnett, S.T., Shaffer, C.A., Bicca-Marques, J.C., Fa, J.E., Hockings, K.J., Shanee, S., Johnson, S.E., Shepard, G.H., Shanee, N., Golden, C.D., Cárdenas-Navarrete, A., Levey, D., Boonratana, R., & Dobrovolski, R. (2022). Global importance of Indigenous Peoples, their lands, and knowledge systems for saving the world's primates from extinction. Science Advances https://doi.org/10.1126/sciadv.abn2927

Group, I.S.H.C.A.C.S. (2023). IUCN SSC guidelines on human-wildlife conflict and coexistence https://doi.org/10.2305/ygik2927

Lees, A.C., Haskell, L.E., Allinson, T., Bezeng, S.B., Burfield, I.J., Renjifo, L.M., Rosenberg, K.V., Viswanathan, A., & Butchart, S.H.M. (2022). State of the World's Birds. Annual Review of Environment and Resources https://doi.org/10.1146/annurev-environ-112420-014642

Maes, T., & Preston-Whyte, F. (2022). E-waste it wisely: lessons from Africa. SN Applied Sciences https://doi.org/10.1007/s42452-022-04962-9

Mogotsi, I., Sekwati, L., & Narayana, N. (2023). Economic Diversification in Botswana:. Economic Diversification in Africa https://doi.org/10.2307/jj.8816119.21

Mogotsi, I., Sekwati, L., & Narayana, N. (2023). Economic Diversification in Botswana:. Economic Diversification in Africa https://doi.org/10.2307/jj.8816119.5

Mogotsi, I. (2023). The Need for Economic Diversification in Botswana. Economic Diversification in Africa https://doi.org/10.2307/jj.8816119.7

Motlaleng, G.R., & Ntsosa, M. (2023). Economic Diversification Strategies and Policies in Botswana. Economic Diversification in Africa https://doi.org/10.2307/jj.8816119.8

Motswapong, M., & Kaboyakgosi, G. (2023). Implications of Regulation on Economic Diversification in Botswana. Economic Diversification in Africa https://doi.org/10.2307/jj.8816119.9

Mpabanga, D., & Bodilenyane, K. (2025). People management policies and practices in Botswana. People Management Policies and Practices in Southern Africa https://doi.org/10.4337/9781035353675.00008

Mpabanga, D. (2023). Botswana. The Global Human Resource Management Casebook https://doi.org/10.4324/9781003307099-18

Muyambiri, B. (2023). The role of agriculture, industry and the service sector in economic growth: The case of Mozambique. African Journal of Agricultural and Resource Economics https://doi.org/10.53936/afjare.2023.18(2).12

Ntsosa, M. (2023). Can the Financial Sector Support Economic Diversification in Botswana?. Economic Diversification in Africa https://doi.org/10.2307/jj.8816119.18

Nyamutswa, T.O., & Lilian, M. (2024). Navigating Human Resource Diversity Management in Higher Education: A Case Study of University of Botswana https://doi.org/10.21203/rs.3.rs-5158810/v1

Nzimande, C.S., Ruggunan, S., Maramura, T.C., & Olabiyi, O.J. (2025). Human resource management in the public sector: A study on recruitment, selection and retention practices in South Africa. SA Journal of Human Resource Management https://doi.org/10.4102/sajhrm.v23i0.3205

O'Faircheallaigh, C. (2023). Botswana and South Africa. Indigenous Peoples and Mining https://doi.org/10.1093/oso/9780192894564.003.0013

Oliver, N.T., & Lilian, M. (2024). Unlocking Diversity's Potential: Challenges and Strategies for Human Resource Management in Higher Education, A Case of the University of Botswana https://doi.org/10.21203/rs.3.rs-5161519/v1

Somfula, O.K., & Zhanda, E. (2023). Training and skills development in the wake of the Fourth Industrial Revolution: Evidence from Botswana borehole drilling companies. SA Journal of Human Resource Management https://doi.org/10.4102/sajhrm.v21i0.2125

Survey, U.G. (2024). Mineral commodity summaries 2024 https://doi.org/10.3133/mcs2024

Tshukudu, T.T. (2023). Managing human resources in government: the case of Botswana. Handbook of Public Management in Africa https://doi.org/10.4337/9781803929392.00026

Tshukudu, T. (2023). HUMAN RESOURCE DEVELOPMENT CHALLENGES IN THE BOTSWANA PUBLIC SECTOR. Revue Européenne du Droit Social https://doi.org/10.53373/reds.2022.61.4.0140