

Human Resource Management in Improving the Quality of Education in Elementary Schools in the Tropical Forest Area of Berau Regency

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Abstract: This study examines the role of human resource management (HRM) in enhancing the quality of education in elementary schools located in the tropical forest area of Berau Regency. Utilizing a qualitative case study approach, data were gathered through in-depth interviews, field observations, and document analysis to explore the unique challenges and opportunities faced by these remote educational institutions. The findings reveal that effective HRM practices, including comprehensive needs assessments, competency evaluations, and the development of contextual training programs, are crucial in addressing logistical constraints, infrastructural deficiencies, and high teacher turnover. A collaborative approach involving internal stakeholders—such as principals, teachers, and administrative staff—and external partners, including local government agencies and educational institutions, emerged as a key strategy for ensuring sustainable HR planning and organizational success. The study also highlights the importance of centralized leadership, supportive administrative frameworks, and continuous performance evaluations in fostering an adaptive and responsive HR system. These integrated HRM practices not only improve teacher motivation and professional development but also lead to better student outcomes and enhanced educational quality. The insights derived from this research contribute valuable evidence for policymakers, school administrators, and educators aiming to implement effective HRM strategies in similarly challenging environments, thereby offering a viable model for educational excellence in remote areas.

Keywords: Human Resource Management; Educational Quality; Elementary Education; Tropical Forest; Remote Areas; Professional Development; Stakeholder Collaboration; Organizational Structure; Case Study; Berau Regency.

INTRODUCTION

Overall Challenges and Opportunities in Ensuring Quality Education, Particularly in Remote or Unique Environments Such as Tropical Forest Areas

Ensuring quality education in remote or unique environments, such as tropical forest areas, presents a complex interplay of challenges and opportunities. The geographical isolation and unique ecological contexts of these regions significantly influence the educational landscape.

One of the primary challenges in tropical forest areas is the lack of adequate infrastructure. Many schools in these regions suffer from insufficient facilities, such as classrooms, libraries, and sanitation. This inadequacy can hinder the learning process and affect student attendance and retention rates. The remoteness of these areas often complicates the delivery of educational resources, making it difficult for schools to obtain necessary teaching materials and technology. As highlighted by Setyadharma, *et al.*, (2024), the quality of the environment and education levels are interconnected; thus, poor environmental conditions can exacerbate educational challenges.

Another significant challenge is the recruitment and retention of qualified teachers. Many educators are reluctant to work in isolated locations due to limited professional development opportunities and inadequate living conditions. This shortage of qualified personnel can lead to a

decline in the quality of education provided. Cultural and linguistic barriers also pose challenges in these regions, as tropical forest areas often have diverse cultural backgrounds. This diversity can complicate curriculum development and teaching methods, as educational content may not always resonate with local communities, and language barriers can hinder effective communication between educators and students.

Despite these challenges, there are numerous opportunities for improving education in tropical forest areas. One significant opportunity lies in community engagement. The unique cultural contexts of these regions present opportunities for local communities to become involved in educational initiatives, such as eco-education programs that integrate local knowledge and environmental stewardship. By fostering community involvement, schools can enhance the relevance of education and cultivate a sense of ownership among community members. Additionally, given the rich biodiversity of tropical forests, there is a significant opportunity to incorporate environmental education into the curriculum. Wu, *et al.*, (2023) emphasize that environmental education can improve environmental quality and promote sustainable practices, thereby cultivating a generation that values and protects their natural surroundings.

Innovative teaching methods also emerge as a potential avenue for enhancing educational quality in these areas. The challenges of remote education can spur innovation, such as the use of digital technology and mobile learning to bridge gaps in resource availability. Insani, *et al.*, (2023) suggest that eco-edutourism can create educational experiences that are both engaging and informative, providing students with hands-on learning opportunities while promoting conservation efforts. Furthermore, increased attention from governments and non-governmental organizations (NGOs) towards education in remote areas can lead to improved funding and resources. Collaborative efforts can facilitate the sharing of best practices and resources among schools, ultimately enhancing educational access and quality.

The Importance of Effective Human Resource Management (HRM) in the Education Sector.

Effective human resource management (HRM) plays a crucial role in the education sector, influencing various aspects of educational quality and organizational performance. The importance of HRM in education extends beyond mere administrative tasks; it encompasses strategic initiatives that shape the overall learning environment and outcomes for both educators and students. One of the primary functions of HRM in education is the recruitment and retention of qualified teachers. As highlighted by Pagán-Castaño, *et al.*, (2021), effective leadership and HRM strategies are essential for creating a supportive environment that fosters teacher well-being and professional growth.

By implementing comprehensive recruitment strategies and providing ongoing professional development, educational institutions can ensure that they attract and retain high-quality educators who are equipped to meet the evolving demands of the educational landscape. This is particularly important in the context of increasing educational standards and the need for innovative teaching practices. Moreover, HRM practices significantly impact organizational commitment and employee performance within educational institutions. Zámečník, *et al.*, (2021) emphasize that the implementation of effective HRM practices enhances employees' existing knowledge and skills, encouraging their participation in innovative initiatives that can improve service delivery in educational settings (Zámečník, *et al.*, 2021)

When educators feel supported and valued through effective HRM practices, they are more likely to be engaged and committed to their roles, which directly translates to improved student outcomes. Another critical aspect of HRM in education is the promotion of a positive organizational culture. As noted by (Opatha, 2019), HRM is a vital field that contributes to the overall effectiveness of educational institutions.

By fostering a culture of collaboration, communication, and continuous improvement, HRM can create an environment where educators feel empowered to share ideas and best practices. This collaborative culture not only enhances teacher morale but also leads to better educational experiences for students. Furthermore, HRM plays a significant role in aligning educational goals with institutional strategies. Edgar, *et al.*, (2024) discuss how sophisticated HRM strategies can enhance service delivery and educational outcomes by aligning human resources with the institution's mission and vision.

This alignment is crucial for achieving long-term success and sustainability in the education sector. In addition to these internal benefits, HRM also facilitates external partnerships and community engagement. By building strong relationships with stakeholders, including parents, local organizations, and government entities, educational institutions can enhance their resources and support systems. This collaborative approach can lead to innovative programs and initiatives that further enrich the educational experience for students.

The Context of Berau Regency

Berau Regency, located in East Kalimantan, Indonesia, is characterized by its rich biodiversity and extensive tropical forest areas. This regency has experienced significant environmental changes over the past decade, primarily due to deforestation driven by activities such as oil palm cultivation, logging, and mining (Aggraeni, *et al.*, 2018). These changes not only impact the ecological balance but also have profound implications for the education sector, particularly for elementary schools situated in these unique environments. One of the primary challenges faced by elementary schools in Berau Regency is the lack of adequate infrastructure. Many schools are located in remote areas, making it difficult to access essential resources and facilities. The rapid population growth—nearly 20% since 2010—has put additional pressure on educational resources,

leading to overcrowded classrooms and insufficient teaching materials (Aggraeni, *et al.*, 2018)

The geographical isolation of these schools often results in limited connectivity, which further exacerbates the challenges of delivering quality education. Moreover, the environmental conditions in tropical forest areas can pose specific challenges for educational institutions. The heavy rainfall, which can reach up to 4,000 mm annually, affects not only the physical infrastructure of schools but also the health and well-being of students (Mustafa, *et al.*, 2024)

Schools may struggle with issues related to sanitation and hygiene, which are critical for maintaining a conducive learning environment. Additionally, the ecological context can influence the curriculum, necessitating the integration of environmental education to foster awareness and stewardship among students. The socio-cultural dynamics of Berau also play a significant role in shaping the educational landscape. The diverse ethnic groups and languages present in the region can create barriers to effective communication and learning. Schools must navigate these complexities to create inclusive environments that cater to the needs of all students. The implementation of child-friendly school policies, as noted by Jannah and Hidayati (2022), is essential for fostering an inclusive atmosphere that supports the growth and development of every child.

Despite these challenges, there are also opportunities for enhancing the quality of education in Berau Regency. The rich natural environment offers unique educational experiences that can be leveraged to promote environmental awareness and sustainability. Schools can incorporate local ecological knowledge into their curricula, providing students with a deeper understanding of their surroundings and the importance of conservation efforts. Furthermore, community engagement can play a vital role in supporting educational initiatives, as local stakeholders can contribute resources and knowledge that enhance the learning experience.

Problem Statement

In the context of elementary schools, particularly in regions like Berau Regency, the effectiveness of human resource management (HRM) practices is critical for enhancing educational quality. However, several gaps and challenges persist in

current HRM practices that significantly impact the quality of education.

One of the primary challenges faced by elementary schools in Berau is inadequate recruitment and retention strategies. Many schools struggle to attract and retain qualified teachers due to ineffective recruitment processes that often lack transparency and efficiency. This leads to a mismatch between the skills of educators and the needs of the school. Research by Zámečník, *et al.*, (2021) emphasizes that effective HRM practices are essential for introducing and implementing innovations in educational settings. Without a robust recruitment strategy, schools may find themselves with underqualified staff, which can adversely affect student learning outcomes.

Additionally, there is a significant lack of professional development opportunities for teachers in these schools. Continuous professional development is crucial for educators to enhance their skills and adapt to new teaching methodologies. However, many schools do not provide adequate training programs or resources for teacher development. As highlighted by Sholeh, *et al.*, (2021), professional organizations play a vital role in improving teacher quality through workshops and training. The absence of such initiatives in elementary schools can lead to stagnation in teaching practices and lower educational quality.

Another critical aspect of HRM in education is the limited performance management systems in place. Effective performance management is essential for evaluating and improving teacher effectiveness. Yet, many schools lack systematic performance evaluation mechanisms that provide constructive feedback and support for teachers. According to Rawis, *et al.*, (2024), HRM is a key element in enhancing productivity and engagement within educational institutions. Without proper performance management, schools may struggle to identify areas for improvement, leading to a decline in overall educational quality.

Moreover, weak organizational commitment among educators can create a negative school culture, where teachers are less motivated to engage with students and collaborate with colleagues. Zámečník, *et al.*, (2021) found that HRM practices significantly influence organizational commitment, which in turn affects educational performance. When teachers feel unsupported or undervalued, their commitment to

the school diminishes, negatively impacting student engagement and achievement.

The challenges in HRM practices directly affect the quality of education in elementary schools. Poor recruitment and retention strategies lead to a lack of qualified teachers, which can result in ineffective teaching and lower student performance. Insufficient professional development opportunities hinder teachers from improving their instructional methods, limiting students' learning experiences. Furthermore, the absence of effective performance management systems prevents schools from addressing issues related to teacher effectiveness, leading to a cycle of underperformance.

Despite the critical role of HRM in enhancing educational quality, existing literature on HRM practices in elementary education remains limited. While some studies have explored HRM's impact on higher education institutions, there is a notable deficiency in research focusing specifically on elementary schools and the unique challenges they face. For instance, while Rawis, *et al.*, (2024) discuss the importance of HRM in educational institutions broadly, there is a lack of targeted studies that address the specific HRM needs and practices within elementary schools. Additionally, the existing literature often overlooks the contextual factors that influence HRM practices in unique environments, such as tropical forest areas like Berau. Understanding these contextual challenges is essential for developing effective HRM strategies that can enhance educational quality. Therefore, further research is needed to identify best practices in HRM within elementary education, particularly in regions facing unique challenges, to inform policy and practice aimed at improving educational outcomes.

Research Objectives and Questions

The overall aim of this study is to evaluate the role of human resource management (HRM) in enhancing the quality of education in elementary schools located in the tropical forest area of Berau Regency. This research intends to provide a comprehensive assessment of current HRM practices within these schools, identify key challenges and success factors in their implementation, and ultimately propose strategic improvements based on the findings. By focusing on these aspects, the study aims to offer valuable insights into how effective HRM can bolster educational quality in unique and challenging environments.

To achieve this aim, the study is guided by two primary research questions. The first question examines how human resource planning is implemented to improve the quality of education in elementary schools in the tropical forest area of Berau Regency. This aspect of the study will explore how strategic planning, resource allocation, and goal setting within HRM contribute to educational outcomes. The second question investigates how human resource organization is conducted to enhance educational quality in these schools. This inquiry focuses on the structure, coordination, and management practices that ensure the effective deployment of human resources to meet educational objectives. Together, these questions provide a framework for understanding the critical elements of HRM that can lead to improved educational quality in the region.

The Significance of the Study

The significance of this study lies in its potential to enhance the overall quality of education through improved human resource management (HRM) practices. For educators, refined HRM strategies can lead to better professional development opportunities, increased job satisfaction, and a supportive work environment that fosters innovation in teaching methods. For school administrators, effective HRM practices offer a roadmap for efficient staff organization, better resource allocation, and streamlined operations, which are critical for managing schools in unique settings like tropical forest areas. Moreover, policymakers stand to benefit from the study by gaining evidence-based insights that can inform the formulation of policies and strategies aimed at elevating educational standards, especially in regions facing distinct environmental and logistical challenges.

Furthermore, the findings of this research are expected to contribute significantly to academic literature by filling gaps in current studies related to HRM and educational quality in non-traditional and remote settings. The study will provide a theoretical framework and empirical data that can be used to understand the impact of HR planning and organization on educational outcomes. Practically, the research offers strategic recommendations that can be implemented in similar contexts, potentially serving as a model for other regions with comparable challenges. In this way, the study not only enriches scholarly discussions but also provides actionable strategies

for educational improvement across diverse educational landscapes.

METHODS

Research Methodology

This study employs a qualitative research approach to deeply explore how human resource management (HRM) is implemented in elementary schools located in the tropical forest area of Berau Regency to improve educational quality. By using a case study method, the research investigates the local dynamics and specific factors that influence the effectiveness of HRM strategies. Data is collected through in-depth interviews, direct observation, and document analysis, allowing the study to uncover both the best practices and the obstacles encountered in managing human resources. This approach provides rich, contextual insights that are essential for developing practical recommendations to optimize HRM in these educational settings.

Data Sources

The study gathers qualitative data to gain an in-depth understanding of HRM practices in the targeted elementary schools. Data sources include in-depth interviews with key stakeholders—such as the school principal, teachers, and administrative staff—which offer detailed insights into current HRM practices, the challenges they face, and the strategies they employ. Field observations complement these interviews by documenting daily interactions, work procedures, and the learning environment within the school. Additionally, official documents—such as the school's strategic plan, activity reports, and teacher performance evaluations—are analyzed to provide an understanding of the formal HRM policies and frameworks that are in place.

Data Collection Instruments

In this study, the researcher acts as the primary instrument for data collection, engaging directly with participants to observe and understand HRM practices in depth. An interview guide is developed to extract detailed information about HRM strategies, personal experiences in overcoming operational challenges, and approaches to address educational issues in the tropical forest context. An observation checklist is utilized during classroom and facility visits to systematically record the condition of educational infrastructure, interactions between teachers and students, and the implementation of HRM practices. A document analysis format is employed to review and interpret key school documents, ensuring that

formal policies are comprehensively examined. Additionally, audio recording devices are used to capture interviews and focus group discussions, while qualitative data analysis software, such as ATLAS.ti, assists in coding and analyzing the collected data.

Data Collection Techniques

The study uses a combination of techniques to ensure a comprehensive collection of data. In-depth interviews are conducted with school administrators, teachers, and administrative staff to gather detailed insights into HRM practices such as recruitment, selection, professional development, and performance evaluation. These interviews are conducted in a private and comfortable setting to encourage open and honest discussion, and they are recorded with the respondents' consent. Field observations are carried out during school hours to document the practical application of HRM practices, including classroom dynamics, staff interactions, and the overall learning environment. A detailed observation checklist is used to ensure that all relevant aspects of HRM and school operations are systematically captured. Furthermore, document analysis is performed on key school documents—such as strategic plans, activity reports, and performance evaluations—to understand the formal HRM frameworks and their impact on school operations.

Data Analysis Techniques

After collecting the qualitative data, it is transcribed and subjected to a systematic coding process. Initially, the data is broken down into smaller units called codes, which allows the researcher to identify recurring themes, patterns, and relationships. These codes are then grouped into categories based on their similarities, facilitating a more organized analysis. A thematic analysis follows, wherein major themes are developed to address the research questions and objectives. These themes are interpreted to gain deeper insights into how HRM practices impact educational quality. To ensure the validity of the findings, triangulation is employed by comparing data from interviews, observations, and document analysis. Additionally, the reliability of the analysis is enhanced through repeated reviews of the coding process by the research team and discussions with peers or mentors, ensuring that the interpretations remain unbiased and robust.

FINDINGS AND DISCUSSIONS

Findings

The findings indicate that the human resource planning process for enhancing educational quality in elementary schools within the tropical forest area of Berau Regency is both strategic and uniquely tailored to the local context. Interviews revealed that HR planning begins with a comprehensive identification of the school's specific needs and challenges. Given the remote location and limited accessibility, school administrators first conduct a detailed needs assessment that considers both logistical constraints and the specialized demands of teaching in an environment rich in natural resources. Educators and administrators analyze the potential and competencies of current staff, evaluating pedagogical skills, technological proficiency, and the capacity to integrate environmental education into the curriculum. This initial assessment is critical as it sets the groundwork for a planning process that is both holistic and adaptive.

In addition to the initial assessment, the planning process is characterized by robust internal discussions and strategic collaboration among all stakeholders. The principal, teachers, and administrative staff engage in intensive dialogues to determine the most effective strategies for professional development. One of the key strategies involves contextualizing training programs to address local challenges, such as adopting nature-based teaching methods and utilizing technology to overcome geographic barriers. Regular training workshops and professional development sessions are implemented, with a particular emphasis on innovative pedagogical techniques that align with the region's environmental context. Furthermore, the school actively seeks external partnerships, collaborating with the local government, the Department of Education, and other educational institutions. These collaborations bring in additional resources and expertise, ensuring that the HR planning process is supported by a wide network of partners who can offer specialized programs, technical support, and policy guidance.

The HR planning process is also structured around both short-term and long-term objectives. In the short term, efforts are concentrated on immediately enhancing teachers' core competencies, particularly in the areas of pedagogy and the integration of technology in the classroom. This

includes initiatives aimed at increasing teacher motivation, reducing turnover, and fostering a collaborative environment among educators. In the long term, the goal is to develop a sustainable and adaptive HR management system that not only supports continuous professional development but also fosters an educational environment where teachers can nurture students' academic skills as well as their environmental consciousness. Despite significant challenges—such as logistical difficulties, varied teacher competencies, limited access to specialized personnel, high staff turnover, and budgetary constraints—the school's commitment to a flexible, responsive HR planning process remains steadfast.

The findings further reveal that the organizational management of HR at SD 001 Talisayan is structured in a manner that is both straightforward and effective, particularly given the unique challenges posed by its remote location in a tropical forest area. The organizational structure places the school principal at the center, where the principal not only makes strategic decisions but also serves as a facilitator and coordinator for HR-related initiatives. This centralized role is complemented by the vice-principal, who manages administrative and managerial functions, and by subject coordinators who organize teachers based on their areas of expertise. Such a structure ensures that decision-making is both collaborative and responsive, allowing teachers to contribute to curriculum development and professional training programs actively. Administrative staff further support these efforts by efficiently managing data, finances, and logistics, thereby ensuring that the daily operations of the school run smoothly despite external challenges.

Evaluation of the HR organizational structure is conducted using a range of performance indicators. Key measures include student academic performance, the level of teacher participation in professional development activities, the quality of collaboration among staff members, and the feedback received from parents and the local community. The data collected from these evaluations demonstrate that a well-organized HR system contributes significantly to improved teaching methods, enhanced teacher capabilities, and, consequently, better student outcomes. Although the school continues to face challenges related to its remote setting, the collaborative approach among internal stakeholders, bolstered by external partnerships, has led to notable improvements in educational quality. Regular

feedback and systematic evaluations are essential, as they facilitate continuous improvement of HR practices, ensuring that the organizational structure remains flexible and responsive to the evolving needs of the educational environment in the tropical forest region.

Overall, the research findings underscore the importance of a well-integrated and adaptive HR planning and organizational management system. The combined efforts of strategic internal planning, targeted professional development, and robust external collaboration not only address the immediate challenges faced by educators in remote tropical settings but also lay the groundwork for a sustainable model of educational excellence. This integrated approach enables the school to navigate logistical constraints, bridge competency gaps among teachers, and ultimately enhance the quality of education in a manner that is both innovative and contextually relevant.

The following tables present a thematic summary of the research findings on human resource management in elementary schools within the tropical forest area of Berau Regency. Table 1 encapsulates the key themes derived from the analysis of HR planning processes, highlighting the steps from needs assessment and competency evaluation to strategic collaboration, contextual training, external partnerships, and ongoing evaluation. Table 2, on the other hand, outlines the core themes related to the organizational structure of HR management, emphasizing centralized leadership, support systems, collaborative decision-making, performance evaluation, continuous improvement, and community involvement. Together, these tables offer a comprehensive overview of how strategic planning and effective organizational practices contribute to enhancing educational quality in this unique and challenging context.

Table 1: Thematic Summary of HR Planning Findings

Theme	Description	Key Findings / Supporting Evidence
Identification of Needs and Challenges	The planning process begins with a comprehensive identification of the school’s unique needs and challenges—especially those arising from its remote location and limited accessibility.	Administrators conduct a detailed needs assessment that considers logistical constraints and the specialized demands of teaching in a natural-resource-rich environment. For instance, one respondent noted that planning starts by identifying “needs and challenges faced by our school” in a remote area.
Competency Analysis	A thorough analysis is performed to assess the potential and competencies of existing educators, focusing on their pedagogical skills, technological proficiency, and ability to integrate local environmental content.	Teachers’ skills are evaluated to ensure they can support nature-based teaching and modern educational methods. One interview excerpt highlighted the analysis of “potential and competencies of our educators” as a basis for further development.
Internal Collaboration and Strategic Discussion	Intensive internal discussions among the principal, teachers, and administrative staff help determine the most effective strategies for professional development and HR management.	Regular meetings and discussions are held to align strategies with local conditions. Respondents mentioned that the process “involves intensive discussions among all stakeholders” to decide on appropriate professional development steps.
Contextual Training & Technology Utilization	Training programs are designed specifically for the local context, emphasizing nature-based teaching methods and the effective use of technology to overcome geographical barriers.	Training is prioritized to address local needs; one respondent explained that they “prioritize training relevant to the local context” such as nature-based methods and technology use to reach remote areas.
External Collaboration	Collaboration with external agencies—including the local government, Department of Education, and partner institutions—plays a crucial role in supplementing internal planning efforts with additional resources and	External partnerships provide access to additional training, funding, and policy support. One interview quote stated that the school “works with various external parties” to support HR planning through specialized programs.

	expertise.	
Regular Evaluation and Flexibility	Ongoing evaluations ensure that the HR planning process remains dynamic and adaptive to evolving educational needs and local challenges.	The planning process includes routine evaluations to assess the effectiveness of strategies. Respondents noted that evaluations “assess the effectiveness of strategies and adjust plans as needed” to remain relevant.
Short-term & Long-term Objectives	HR planning is oriented toward achieving both immediate improvements in teaching competencies and the development of a sustainable, adaptive HR system for long-term educational excellence.	Short-term goals focus on enhancing core teacher competencies and motivation, while long-term objectives aim to establish a sustainable HR system that fosters continuous professional growth. One respondent remarked on the dual focus: “short-term improvements and long-term system sustainability.”
Stakeholder Involvement	The planning process is inclusive and participatory, engaging not only internal staff but also parents and community members to ensure that HR development strategies are well aligned with local needs.	Involving a broad range of stakeholders helps ensure that programs are well received and contextually appropriate. As noted, the active engagement of parents and community in the planning process “ensures that HR development is aligned with local needs.”

Table 2: Thematic Summary of HR Organization Findings

Theme	Description	Key Findings / Supporting Evidence
Centralized Leadership	The school principal plays a central role in HR organization, serving as the strategic decision-maker, facilitator, and coordinator for all HR-related initiatives.	The principal is described as not only making strategic decisions but also actively facilitating discussions and collaborations. One interview excerpt noted that the principal “serves as both the strategic decision-maker and facilitator” in HR organization.
Support Structure	A clear support system involving the vice-principal, subject coordinators, and administrative staff complements the principal’s role, ensuring effective execution of HR policies and day-to-day operations.	The vice-principal supports administrative functions while subject coordinators organize teachers by specialty. Administrative staff manage data, finances, and logistics. Respondents emphasized that this structure “ensures smooth operations and effective implementation of HR strategies.”
Collaborative Decision-Making	Teachers and other stakeholders are actively involved in decision-making processes regarding curriculum development and professional training, ensuring that HR policies reflect classroom realities.	Teachers participate in decision-making, which makes HR policies more responsive to on-ground needs. An interview quote mentioned that teachers are “involved in decisions related to curriculum development and professional training” to ensure practical applicability.
Performance Evaluation & Feedback	The effectiveness of the HR organizational structure is assessed using a range of performance indicators, including student outcomes, teacher participation in training, and feedback from the community.	Evaluation measures include student academic performance, teacher engagement in professional development, and feedback from parents and the community. One respondent noted that improved student performance and teacher participation serve as clear indicators that the HR organization is working effectively.
Continuous Improvement	Regular reviews and evaluations enable the school to continuously refine and improve its HR organization, adapting to changing needs and challenges over time.	Ongoing evaluations lead to adjustments in HR strategies, ensuring that the organization remains effective. As one respondent stated, “we continuously evaluate and refine our HR organization to better support educational goals.”
External	External feedback from parents,	Regular meetings with parents and community

Engagement and Community Involvement	community members, and partner organizations is integrated into the HR organizational process, ensuring that decisions are responsive to broader educational needs.	surveys provide valuable insights that inform HR improvements. An interview excerpt highlighted that “feedback from parents and the community is an important indicator of HR organizational success.”
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DISCUSSIONS

The findings from the study of SD 001 Talisayan illustrate a comprehensive and contextually aware approach to human resource (HR) planning and organization that significantly enhances educational quality, particularly in challenging remote environments. The HR planning process begins with a detailed assessment of the school’s specific needs and challenges, which is crucial for tailoring strategies to the unique demands of teaching in a natural-resource-rich environment. This assessment includes identifying logistical constraints and evaluating the competencies of educators, focusing on their pedagogical skills, technological proficiency, and ability to integrate local environmental contexts into their teaching practices. This approach aligns with contemporary educational management theories that emphasize the importance of customizing professional development to reflect local realities and challenges. (Bryson, *et al.*, 2020)

Active internal collaboration is a cornerstone of the HR planning process at SD 001 Talisayan. Regular discussions among the principal, teachers, and administrative staff ensure that the planning process is inclusive and adaptive. This collaborative environment fosters a sense of ownership among educators and allows for the incorporation of diverse perspectives in decision-making. The implementation of contextual training programs that leverage technology and nature-based teaching methods directly addresses the inherent geographical and resource limitations faced by the school. Such training not only enhances educators' competencies but also enriches the learning experiences of students by making education more relevant to their surroundings (Merchie, *et al.*, 2016).

External collaboration further strengthens the HR planning process. Partnerships with local government agencies, the Department of Education, and other educational institutions provide vital support in terms of additional resources, specialized training, and policy guidance. This multi-stakeholder involvement enriches the planning process and helps secure the necessary support for implementing innovative HR strategies. The integration of routine evaluations

into the planning cycle ensures that the HR strategy remains dynamic, with both short-term objectives—such as enhancing teachers’ core competencies—and long-term goals aimed at establishing a sustainable and adaptive HR system. Despite challenges such as high teacher turnover and limited budgetary resources, the flexible and participatory planning approach appears effective in creating a robust foundation for ongoing educational improvement (Keegan, *et al.*, 2017).

In terms of HR management organization, the findings highlight a clear and streamlined structure that is particularly suited to the demands of a remote educational setting. Centralized leadership, with the principal at the helm, provides strategic direction and facilitates the cohesive implementation of HR policies. The support structure, which includes the vice-principal, subject coordinators, and administrative staff, ensures that administrative functions are handled efficiently, allowing academic staff to focus on teaching and professional development. Importantly, the active involvement of teachers in decision-making processes—especially concerning curriculum development and professional training—ensures that HR policies remain relevant and responsive to classroom realities. This collaborative model of HR organization is validated by performance indicators such as improved student outcomes, high teacher participation in training, and positive feedback from parents and the community (Bondarouk, *et al.*, 2015)

The evaluative process encompasses both quantitative indicators, such as student performance metrics, and qualitative feedback from the school community, providing a continuous loop for improvement. This systematic evaluation not only validates the effectiveness of the current HR organizational structure but also informs necessary adjustments to address emerging challenges. The commitment to continuous improvement, as evidenced by regular performance reviews and stakeholder feedback, supports the creation of a resilient HR management system capable of evolving in response to changing educational needs and local conditions (Bondarouk, *et al.*, 2016).

Overall, the integrated approach to HR planning and organization in SD 001 Talisayan demonstrates that a well-structured and contextually aware HR management strategy can significantly enhance educational quality, even in challenging remote environments. The study's findings contribute to both academic literature and practical strategies by illustrating how strategic planning, collaborative decision-making, and continuous evaluation can create a sustainable model for educational excellence. This comprehensive discussion emphasizes that addressing local challenges through tailored HR practices is not only feasible but also essential for improving teaching quality and student outcomes in geographically isolated areas (Uysal, 2020)

CONCLUSION

This study investigates the multifaceted challenges and opportunities associated with providing quality education in remote tropical forest areas, using Berau Regency as a case study. The introductory discussion highlights the significant obstacles—such as inadequate infrastructure, difficulties in recruiting and retaining qualified teachers, and cultural and linguistic barriers—that impede educational progress in these unique environments. At the same time, the text emphasizes the potential for leveraging local environmental assets and community engagement to enrich educational experiences through eco-education initiatives and innovative teaching methods.

Central to the discussion is the role of effective human resource management (HRM) in addressing these challenges. The text argues that robust HRM practices, including strategic recruitment, continuous professional development, and performance management, are essential for creating a supportive and dynamic educational environment. Such practices not only improve teacher commitment and performance but also contribute to a positive organizational culture that aligns with the institution's mission and fosters collaborative decision-making.

The context of Berau Regency further underscores the urgency of tailored HRM strategies. With its rich biodiversity juxtaposed against the realities of deforestation, overcrowded classrooms, and limited connectivity, the region presents a unique set of circumstances that require adaptive educational strategies. The study aims to evaluate HRM practices in elementary schools in this area by focusing on two primary aspects: the strategic

planning of HR and the organizational structure that supports these initiatives.

Methodologically, the research adopts a qualitative case study approach, utilizing in-depth interviews, field observations, and document analysis to capture the nuanced experiences of school administrators, teachers, and other stakeholders. The findings reveal that successful HR planning involves a comprehensive needs assessment, competency evaluation, strategic internal collaboration, contextual training programs, and sustained external partnerships. Similarly, an effective HR organizational structure—characterized by centralized leadership, supportive administrative frameworks, and active teacher participation—plays a critical role in enhancing student outcomes. Together, these insights offer a sustainable model for improving educational quality in challenging remote environments..

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Source of support: Nil; **Conflict of interest:** Nil.

Cite this article as:

Mulyati, M., Mulawarman, W.G., Warman, W., Akhmad, A., Haeruddin, H. and Nurlaili, N. "Human Resource Management in Improving the Quality of Education in Elementary Schools in the Tropical Forest Area of Berau Regency." *Sarcouncil Journal of Education and Sociology* 4.3 (2025): pp 6-17.