



Mining Heritage-Based Tourism Development Management System: A Sustainable Economic Study

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Abstract

Through the ages, mining left behind wasteland of limited value, scarred by shafts and ponds. However, enterprising management coupled with inventive development practices, hopes to turn this legacy into a tourist boom. The primary goal of this study will tackle the planning and implementation for transforming these former mining eyesores into charming havens. The focus is on ensuring sustainable growth from these tourist hubs, all while breathing new life into these remnants of mines. Identifying pivotal facets which must be orchestrated for tourism development, this study utilized a qualitative descriptive approach towards engagement of stakeholders. The meticulously designed management system model is the analytical framework underlying this research, aimed at achieving synergistic and collaborative effort on the tourism development. In Bangka Belitung Province, the study zeroed in on Kampong Reklamasi within East Belitung Regency. The conclusion from the study show that a comprehensive developmental system is the core foundation of effective tourism development management. Such a system is founded on a mixture of creative innovation and a collaborative link between multiple stakeholders. BUMDes have the primary responsibility for successful management within the scope of fostering the tourism potential of the reclamation community. The success of BUMDes in guiding this tourism attraction not be seen in a vacuum but rather as the result of synergistic cooperation with stakeholders. Their individual contributions and roles in the development of heritage-focused tourism are a prerequisite for this collaboration. A robust and long-lasting economic framework for sustainable development is promoted by this symbiotic approach.

Keywords: Mining heritage; tourism development; management system; sustainable economy.

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1. Introduction

Indonesia is known as a country that is richly endowed with precious resources, with its enormous natural reservoirs standing out. This abundance of natural resources has sparked the cultivation of a variety of agricultural products and drawn people and organizations from all over the world to Indonesia's beaches. Tin stands out among these highly sought-after natural gems as a noteworthy highlight that is recognized outside of Indonesia. In particular, the island of Belitung solidifies its position as one of Indonesia's top tin-rich regions by gaining prominence on a global scale as a premier hub for tin production.

The vast tin deposits on Belitung Island, which are a monument to the island's exceptional geological endowment, stand out among the island's wealth of natural resources. History records that Belitung was a hotbed of tin mining activities long before Indonesia gained independence, holding the position as the region's top tin producer. Belitung and East Belitung are the two distinct administrative districts that currently divide Belitung Island's territory. A deeper look at these demarcations reveals that East Belitung is where the majority of mining sites are located, making it the location of the mining industry's geographic epicenter.

Using the creative talent of a wide range of invested stakeholders, several former mining sites have been skillfully transformed into alluring tourism destinations. Other abandoned mining landscapes, however, have a reservoir of unrealized potential that might be exploited in a similar way to add value. One such location emerges as a beacon of tourism appeal through the transformation of these post-mining terrains, enhancing the environment and adding value for the stakeholders. Both the federal and regional governments stress the need of promoting tourism development inside Belitung's borders in the framework of tourism. The development of tourism in the Belitung region, a significant national tourist attraction, is being pushed forward by the active involvement of a wide range of stakeholders.

The development of mining heritage-driven tourism is a prominent concern among stakeholders, particularly local governmental entities, amid the diverse array of developing tourist locations. According to research by [Różycki & Dryglas \(2016\)](#), this strategic initiative has the potential to provide the region and its related stakeholders with increased value. The further spread of tourist attractions over a variety of locations in the Belitung area is expected to have a transformative impact on the economics of the region. The anticipated ripple impact on regional achievement, which includes the crucial areas of economic growth and stakeholder interests, serves as the foundation for this revolutionary potential. Given this exciting premise, the current study sets out on a riveting quest to explore the complex economic ramifications resulting from the fusion of tourism-oriented growth and the pool of mining legacy inherent to the area. This investigation is especially pertinent since it can reveal complex insights into the economic aspects brought about by the interaction between tourism and the area's extensive mining history.

A number of researchers have carried out investigations into the growth of mining tourism, [\(Baihaqki & Islami, 2022; Ghosh, 2021; Ionica et al., 2020; Różycki & Dryglas, 2016; Singh & Ghosh, 2021\)](#) post-mining facilities and tourism [\(Hojka, 2023\)](#), also sustainable post-mining land use and recreation [\(Kivinen, 2017\)](#). The author's research curiosity is now focused on a thorough investigation after understanding the complex interactions between mining legacy, stakeholder creativity, the allure of tourism attractions, and their resulting economic ramifications [\(Lamparska, 2019\)](#). This upcoming investigation will delve into the creation of a tourism development management system that is precisely crafted to promote a sustainable economic environment. Studies focusing on tourism development and the reuse of former mining sites take a paramount significance in light of the pressing urgency, grounded in the necessity to define the boundaries of a development management framework [\(Sinnott & Sardo, 2020\)](#). This investigation also includes identifying the multifaceted contributions made by many stakeholders and outlining the strategic plan guiding the coordination of various developmental projects that ultimately support unshakable economic

sustainability. Mining heritage-based study, specifically related to tin mining heritage is rarely conducted. On the other hand, the study can also provide novelty related to sustainable economic in Indonesia.

2. Literature Review

Development Management System

Aligned with the overarching theme of this research, which centers on the formulation of a mining heritage-centric tourism development management system model geared towards fostering a sustainable economic landscape, the foundational theory employed is that of management system theory. This paradigm encapsulates the essence of productive management systems, epitomizing an ethos that demands continual progress: each day surpassing the previous, and the forthcoming outshining the present. The principle of Input-Throughput-Output (ITO) underscores the conversion of lesser value into enhanced worth, with the trajectory perpetually advancing toward increased value creation—an ongoing, perpetual cycle. Central to this dynamic is the orchestration of management, the propellant that propels organizations and institutions forward, facilitating a transformative process that continually elevates their performance. In essence, management is the propelling force steering entities toward improvement, and this transformational journey is elucidated through a visual representation in Figure 1, symbolizing the conceptual underpinning of the systems model.

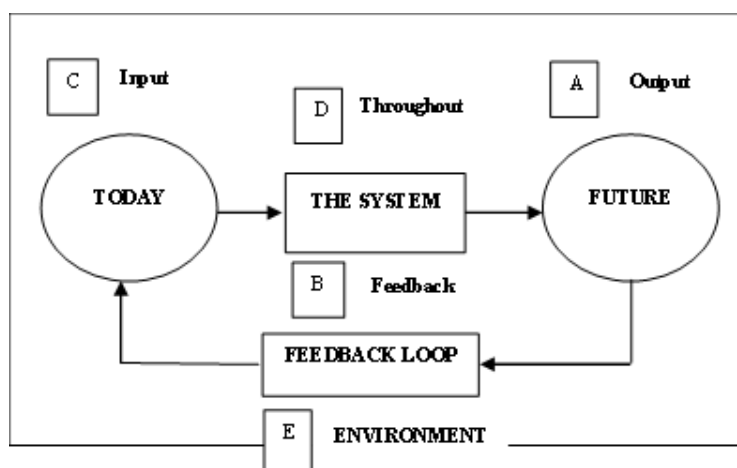


Figure 1. Conceptual Model
Source: [Haines \(2003\)](#)

Indeed, reality rarely adheres to a strictly linear trajectory, and future outcomes are far from guaranteed to be consistently favorable; the spectrum spans from deterioration to triumph and beyond. However, proactive measures are consistently undertaken to mitigate the potential for unfavorable outcomes, striving to minimize the occurrence of failures and optimizing the prospects for improvement. The endeavor is anchored in the pursuit of enhancing circumstances, with the intention firmly fixed on progressing toward positive outcomes rather than regressing or faltering.

With the unit of analysis centered on tourist attractions, the foundational theoretical framework employed is rooted in collaboration management theory augmented by a systems-oriented approach. The crux of this perspective lies in recognizing that the transformation of an entity into a compelling tourist attraction necessitates a structured metamorphosis facilitated by management practices, with a specific focus on collaboration management. The success and appeal of a tourist attraction hinge upon effective management; suboptimal management invariably results in diminished attraction quality and reduced success rates. Thus, the pivotal role of sound tourist attraction management emerges, underscored by adherence to established management principles and rules. The management

of tourism objects is catalyzed by the generation of innovative and productive ideas, often stemming from imaginative minds. Conceptually, these inventive notions are rooted in the aspiration to address the diverse needs of stakeholders, encompassing governmental bodies, customers, shareholders, entrepreneurs, employees, and the broader public. As such, the heart of this approach emphasizes the imperative of aligning these productive ideas with the overarching goal of satisfying the multifaceted needs of these vested stakeholders, thereby fostering the viability and allure of the tourist attraction.

The significance of local communities and local official institutions in the management of a tourist attraction is underscored in the scholarly work of [García-Sánchez et al. \(2021\)](#). It is imperative to recognize that successful tourism development entails more than just conceptualizing creative ideas; the crucial imperative lies in their effective execution. This execution is manifested through deliberate actions that enable the realization of envisioned outcomes. In essence, the attainment of desired results necessitates pragmatic steps, particularly in terms of resource transformation and the judicious allocation of resources. This approach ensures that resources are utilized both effectively and efficiently, thereby aligning with the overarching goal of optimizing the tourism development endeavor.

The essence of the tourist attraction business model, as elucidated by [Han \(2021\)](#), hinges on the paramount importance of fulfilling consumer needs. These consumers, or tourists, constitute the bedrock of support for the business entity. Consequently, the crux of success centers on the attraction's ability to captivate and align with consumer expectations. Notably, the existence of a tourist attraction is contingent upon the presence of tourists or consumers. Within the tourist attraction paradigm, all stakeholders, encompassing shareholders, employees, local communities, and governmental entities, converge upon a common imperative: the establishment of conditions that perpetually fulfill their respective interests. In this holistic framework, the manager's role is to craft programs that are both feasible and appealing to the market, ensuring marketability and profitability. Providers of funds seek the judicious and effective utilization of resources, while employees aspire to secured employment. Simultaneously, the government aims to derive a share from the augmented value engendered by tourist attractions, a facet often realized through increased employment opportunities.

In the pursuit of striking a sustainable balance between social and economic sustainability, as emphasized by [Chow \(2014\)](#), the imperative for collaboration resonates prominently among all stakeholders vested in the development of a tourist attraction. Conceptually, these stakeholders, ranging from business entities and governmental bodies to society at large and beyond, share a common interest: the perpetual growth and advancement of the tourist attraction. This shared aspiration finds realization through the conduit of profitable growth. This underscores the essential need for collaborative efforts from each stakeholder, leveraging their distinct roles to collectively shape the evolution of tourist attractions ([Graci, 2016](#); [Saito & Ruhanen, 2017](#)), engendering added value for all stakeholders. In this concerted endeavor, collaboration holds the potential to yield multifaceted benefits, including bolstered regional ([Najafi et al., 2014](#)) and the provision of both economic and social advantages to the local community ([Bultjens et al., 2010](#); [Samuil et al., 2020](#); [Toderas et al., 2019](#)).

Land Productivity in Economic Sustainability: Islamic Perspective

In Islamic doctrine, it is posited that all virtuous endeavors are deemed acts of worship, contingent upon their initiation with a genuine intention, specifically the intention to worship the Almighty. This theological tenet finds support in a verse from the Quran, which translates to, "I have only created djinns and humans, that they may worship Me" (Az-Zariyat: 56). The conscientious utilization of the natural world for the betterment of human existence is regarded as a manifestation of worship. This perspective extends to the responsible practice of mining, wherein the pursuit of benefits for the broader populace is also considered an act of devotion. Consequently, any individual who engages in

the conservation and transformation of unproductive land, such as former mining sites, into productive and value-added assets is engaging in a form of worship.

On this terrestrial realm, the resources available can be categorized into two broad classes: those readily employable in their natural state, exemplified by water and fruits, and those necessitating a series of processing or management steps before their utilization, as exemplified by land and trees, among other resources ([Anwar, 1989](#)). Consequently, the transformation of unproductive land or land holdings, contingent upon the consent of their rightful proprietors, constitutes a commendable endeavor imbued with inherent life-enhancing value.

In Surah al-Baqarah, verse 30, which states the appointment of humans as caliphs on the face of the earth, it tends to be caliphs in the general sense, namely cultivating nature, utilizing nature, and preserving nature ([Abdurrahman, 2012](#)). The caliph referred to in terms of managing natural productivity is for all interested people (stakeholders). Productivity management formulates, and strives to build, "Today must be better than yesterday, and tomorrow must be better than today" as per the philosophy embraced in the pursuit of responsible stewardship. Producing post-mining land into a tourist attraction is also a noble effort, creating added value for nature conservation and contributing to the development of sustainable economic benefits.

3. Methodology

This study utilizes qualitative approach. According to [Denzin & Lincoln \(2005\)](#), a qualitative approach necessitates the incorporation of pertinent approaches as well as the use of intrinsic contexts to explain developing phenomena. According to this viewpoint, the current study uses a qualitative descriptive methodology. By utilizing qualitative method, this study will be able to provide profound information and discover vital aspects, necessary in the development of mining heritage-based tourism.

This strategy outlines the explanatory perspective of the under-review mining heritage-based tourism development management system model to clarify its ability to generate profitable growth while creating long-term economic benefits for stakeholders. The author then explores the analysis and explanation of stakeholder interaction while also investigating crucial elements comprising the duties and responsibilities inherent to each stakeholder in the context of the development of the examined tourist attraction. The discernment gained from preliminary investigations, which highlighted the importance of stakeholder involvement and contributions within the framework of the ex-mining tourism development management system model, served as the foundation for the choice of the research title and called for a more in-depth analysis. Furthermore, the conceptual framework used in this study is consistent with Allen-Abeng's "Needs-Results-Work Model" ([Abeng, 2006](#)).

Additionally, both library and field data are included in the necessary data for this study. Information from scholarly books and periodicals makes up library data. In contrast, field data are gathered from extensive, in-depth interviews with participants who have a direct stake in the growth of ex-mining tourism within the chosen study areas. The research's analytical framework was developed in accordance with management science principles. The fascinating "Kampung Reklamsi" tourist attraction located inside the boundaries of East Belitung Regency, which is part of the wider Bangka Belitung Province, is the geographic focus of this study.

4. Results And Discussion

Mining Heritage-Based Tourism Development Management System

Belitung stands as a prominent national tourist destination within Indonesia, boasting a diverse array of attractions. Particularly, in the eastern region of Belitung, there are no fewer than nine distinct categories of tourist attractions. These encompass beach-related tourism, protected coastal forest excursions, expansive forest exploration, agro-based tourism, historical sites, maritime tourism, literary tourism, mining tourism, and more. Among these, one noteworthy category is the heritage of

former mining sites, referred to as "mining heritage" – locales that have undergone transformation from disused mines into tourist attractions.

Within East Belitung, a region recognized for its mining sector, particularly in tin mining, numerous abandoned mining excavations exist. However, it's important to note that not all of these former mining excavations possess the requisite technical and economic viability to be effectively repurposed as tourist attractions. Among these sites, a standout example of successful transformation into a tourist attraction serves as the focus of this research, known as "Kampong Reklamasi." This revitalized area stands as a testament to the potential for reinvigorating disused mining lands into captivating tourist destinations.

The framework for the development of the Kampong Reklamasi tourist attraction was originally rooted in the concept of mining heritage. Prior to its transformation into a tourist destination, this locale existed as lakes resulting from previous mining excavations. This signifies that upon abandonment from its prior role in tin mining, its intrinsic value was less than 1 (< 1) in terms of minimal added value and unproductive land use. To elevate land with a value below 1 into a realm of productivity—measured as exceeding 1 (> 1)—a fundamental requirement is the cultivation of innovative ideas executed through collaborative endeavors involving diverse stakeholders. These stakeholders share a common objective: to foster growth and profitability, thereby contributing to the overarching aspiration of enriching the economy while fostering a sustainable environment.

To transform a former mining site from a value below 1 (unproductive) to a value exceeding 1 (productive) for its utilization as a tourist destination, an initial prerequisite is the reclamation of the ex-mining land, as stipulated in Government Regulation (PP) No. 78 of 2010 regarding Reclamation and Post-Mining. In the case of the post-mining land chosen as the research unit, reclamation efforts have been diligently executed prior to its transformation into a tourist attraction. This meticulous reclamation process ensures that the available land resources are suitably primed for their role as a compelling tourist destination. The commencement of the reclamation journey serves as an imperative step that cannot be overlooked; rather, it must be meticulously fulfilled to ensure the suitability, sustainability, and viability of the land's transformation.

Indeed, creativity serves as the pivotal force driving developmental strides, encompassing the realm of tourism expansion within the Eastern Belitung region—a sector that assumes paramount significance in shaping the area's identity. The custodianship of the subject tourist site has been entrusted to BUMDes (Village-Owned Enterprises), which collaborates harmoniously with vested stakeholders. The effectiveness of this management rests heavily on BUMDes' operational performance and the adept execution of its orchestrated programs, wielding substantial influence over the resounding triumph of the "Kampong Reklamasi" tourist attraction. In the pursuit of constructing a sustainable economy, the tourism development management system, rooted in mining heritage, is elucidated in Figure 2—a visual representation adapted from Allen-Abeng's "Needs-Results-Works Model" ([Abeng, 2006](#)). This model underscores the interconnected interplay of essential components, propelling the endeavor to materialize a thriving and enduring tourism ecosystem that nurtures both economic vitality and lasting cultural preservation.

The collaboration among stakeholders in the establishment of this tourist attraction encompasses an array of entities. It involves government officials, including local authorities, tin companies, BUMDes, culture and tourism offices, micro and small businesses, media outlets, and the local community. The synergy among these stakeholders is pivotal in the endeavor's success. The government shapes the trajectory through its policies, while tin companies contribute indispensable infrastructure. Crucially, the financial backing for this tourism development stems from corporate social responsibility (CSR) funds, thus reflecting a proactive commitment to community well-being. The tin company holds a multifaceted role as the proprietor of the post-mining land, the catalyst behind its transformation into a tourist attraction, and the primary financier of the project through CSR funds. This multifunctional role underscores its pivotal influence in driving the initiative's

fruition. Furthermore, community participation is an invaluable facet. The local populace assumes roles both as workers contributing to the attraction's operation and as enthusiastic contributors to its development. The workers' contentment in their roles stems from a sense of job satisfaction, safety, and fair compensation, which are elements that collectively reinforce their dedication to the project's success.

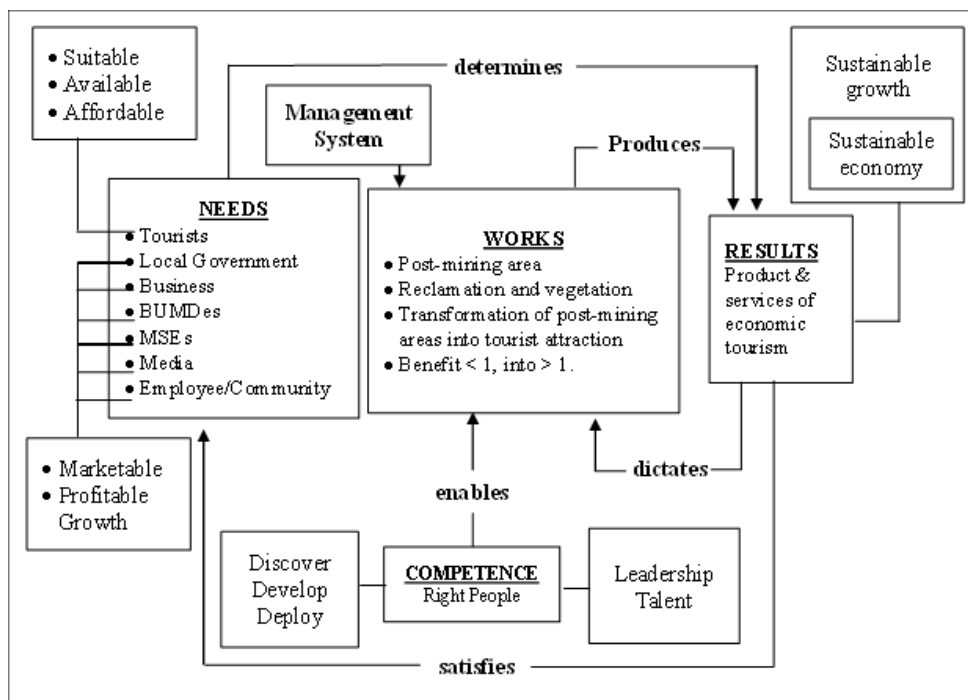


Figure 2. Tourism Development Management System
 in Building Economic Sustainability
 Source: Processed Data (2023)

As the custodian entrusted with the management of this tourist attraction, BUMDes shoulders a weighty responsibility, which fundamentally shapes the trajectory of tourism development. The triumph of this tourism endeavor hinges, in part, on the efficacy of BUMDes' leadership and operational talent. Consequently, the criteria essential for the performance of BUMDes transcend mere enthusiasm; it necessitates the presence of individuals who are not only driven but also possess the requisite competencies. The assessment conducted in the field underscores the imperative for heightened creativity within BUMDes as they spearhead the development of this tourist attraction. Indeed, various business units have endeavored to furnish exceptional services to consumers, or tourists, as evidenced by their progressive efforts. In this pursuit, an unwavering commitment to innovation must be maintained. The ongoing development initiatives are inexorably linked to their ability to craft and offer optimal tourism products, thereby perpetuating the attraction's appeal and longevity. The confluence of inventive ideas and relentless dedication stands as the bedrock upon which BUMDes shapes the course of this transformative tourism journey.

The continued advancement of Kampong Reklamasi attraction hinges upon the collaborative dynamics of its management system. The scope of growth and development transcends the capacity of BUMDes to operate in isolation; instead, it necessitates the synergistic participation of various stakeholders. The tin company, acting as the financial contributor through its CSR initiatives, assumes an additional role of supervisory oversight, ensuring the alignment of fund utilization with proposed plans. This supervisory role extends beyond observation, encompassing corrective measures when

deemed essential. This approach underscores the mutual aspiration for effective and efficient development, ultimately fostering a perpetual cycle of improvement. The burgeoning significance of BUMDes managers' creativity is indisputable, particularly in their pivotal roles as stewards of this tourist attraction's management. Their inventive prowess fuels the development of programs that bolster the attraction's success, enriching its appeal to potential visitors. By crafting innovative initiatives, BUMDes not only engages tourists but also nurtures an environment that continuously attracts them to the destination, perpetuating its allure and prosperity.

As a complementary facet bolstering tourist attractions, the presence of Micro and Small Enterprises (MSEs) remains intertwined ([Siregar & Suma, 2022](#)). These enterprises stand as integral components, essential for a holistic and satisfying tourist experience. MSEs, particularly in the realm of culinary offerings and souvenirs, fulfill a pivotal role that enriches the range of services available at tourist destinations. The allure of MSE products resonates deeply with visitors, enhancing their overall experience. This resonance emanates from the undeniable connection between MSEs and the core tourist attraction, particularly in terms of culinary delights and unique souvenirs that mirror the essence of the locale and its offerings. The distinctiveness of MSE products adds an extra layer of charm, catering to the preferences of the consumers who partake in this tourist attraction. MSEs stand as the vital bridge that completes the tapestry of this experience, encapsulating the spirit and ambiance of the location. Consequently, the steadfast alignment and support of all stakeholders are crucial to bolstering the presence and vitality of MSEs in their role of fortifying the triumph of the tourist attraction. Moreover, the collaboration of enterprises with MSEs is noteworthy ([Rachmiatie et al., 2023](#)). For instance, the Company collaborates with MSEs to furnish souvenirs that resonate with the mining theme. These souvenirs, crafted from a blend of tin materials and incorporating the unique "Batu Satam" artifacts, epitomize the essence of mining heritage-based attractions. This collaboration reinforces the authentic experience and showcases the distinctive character of the attraction, with "Batu Satam" serving as an emblematic icon that epitomizes the uniqueness of the Belitung region.

In the realm of tourism development, the media plays an indispensable role, particularly in the crucial aspect of promotional activities, as underscored by [Singh & Ghosh \(2021\)](#). This role is vividly apparent in the dissemination of information pertaining to the burgeoning awareness surrounding mining heritage-based tourist sites situated on Belitung Island. The media, spanning platforms such as the web, YouTube, Instagram, and traditional outlets like print media, magazines, and journals, assumes a pivotal role in amplifying the recognition of these attractions. The rapid advancement of information technology has ushered in an era of unprecedented opportunities, effectively harnessed by stakeholders in the tourism industry for extensive promotional campaigns. This expansive reach is accompanied by the responsibility of optimizing these opportunities to their fullest potential. In this dynamic landscape, the harmonious synergy between promotional efforts and the delivery of exceptional tourist experiences is paramount. The comprehensive integration of captivating promotion with outstanding offerings ensures a cohesive and gratifying engagement with tourists, solidifying the destination's allure and ensuring its sustained growth.

Tourism Development Collaboration in Building a Sustainable Economy

In the pursuit of sustainable development, as affirmed by [Kobyłańska & Lorenc \(2019\)](#), [Konieczna-Fuławka et al. \(2023\)](#), and [Mehdipour Ghazi et al. \(2021\)](#), the linchpin of tourism progression is the cultivation of human resources. This pivotal aspect, often referred to as human development, is a cornerstone echoed in the works of [Baum \(2015\)](#). This human resource development extends across various facets, encompassing BUMDes as the stewards of the tourist attraction, companies, MSEs, and beyond. Essentially, the enhancement of stakeholder human resources is indispensable, a goal achieved through multifaceted initiatives such as training, educational programs, hands-on experiences, and more. A cadre of skilled and professional human resources possessing acumen in management and entrepreneurship underpins the delivery of elevated tourism services. This

enhancement consequently elevates the quality of tourism experiences, fostering an environment where the appeal of the offerings resonates more profoundly with visitors. Consequently, the growth in the quality of services serves as a catalyst in driving greater footfall of tourists, drawn by the allure of enhanced tourism products and services. The symbiotic relationship between human resource development and tourism progression exemplifies the role of nurturing skilled and empowered human capital in facilitating sustainable growth.

The synergy of collaborative efforts among all stakeholders plays a pivotal role in fostering sustainable growth, as exemplified by the enduring success of the reclamation village tourist attraction, as attested by one of the stakeholders in their BUMDes report. Over the course of its management, this attraction has consistently demonstrated profitability, remarkably steering clear of significant losses. Furthermore, its ability to allure an expanding number of visitors, achieved through the implementation of imaginative programs and events, underscores a fundamental principle: the more innovative and creative the stakeholders are in managing this mining heritage-based tourist destination, the more it thrives as a magnet for tourists, consequently amplifying its contribution to economic sustainability. Thus, the collaborative and professional management of this attraction becomes paramount. These concerted tourism development efforts are not only commendable for their economic value but also for their positive impact on environmental conservation and the enhancement of overall quality of life in the region.

The empirical findings gleaned from comprehensive field research reveal a noteworthy alignment between the tourist attraction and the expectations of its visitors. The tourists who flock to this captivating destination find themselves immersed in an experience that encapsulates elements of distinctiveness, aesthetic allure, meticulous cleanliness, superior comfort, and overall convenience. Notably, the affordability of the entrance fee has garnered favor among tourists, who deem it not only reasonable but also within reach for a wide range of visitors. Meanwhile, the benefactors who have generously funded the development of this tourist gem express a high level of satisfaction with their investment. They perceive it as a worthy cause, a sentiment reflected in their continued commitment to channeling Corporate Social Responsibility (CSR) funds towards the ongoing development of this attraction. Their motivation remains rooted in the belief that such investments consistently yield added value for all stakeholders involved. Furthermore, a close examination of the workforce reveals that the majority of employees hail from the local community, and their perspectives underscore the significance of this initiative. These dedicated workers cherish their roles not only for the financial security they provide but also for the promise of sustainable income. As a result, they feel a profound sense of stability, contributing to the overall cohesion of the local community. In a broader context, the existence of this thriving tourist attraction reverberates positively throughout the region, elevating the performance of regional tourism efforts. This impact is instrumental in advancing the local government's tourism agenda, underlining the attraction's pivotal role in driving economic growth and enhancing the quality of life within the area.

Theoretically, this research has proven the validity of collaboration theory which mentions that development is only available through total collaboration from every stakeholder instead of individually constructed. For example, the people as one of the stakeholders must be actively involved and participated in the development process, including in the development of mining heritage-based tourism.

5. Conclusion

The development of tourist attractions transcends the efforts of singular entities, whether they be communities, companies, specific business entities, or local government bodies. Instead, tourism development necessitates the implementation of a collaborative management system, harnessing contributions from each stakeholder in alignment with their respective fields and roles to foster a synergistic endeavor. This underscores that the triumph of a tourist attraction hinges on the

proficiency of its management, not the failure of its development; any challenges usually stem from inefficiencies in administration. In the context of mining heritage-based tourism, an integrated development management system has been meticulously crafted. This framework derives its essence from the fusion of ingenuity and cooperation among stakeholders, which notably encompass governmental bodies, regional authorities, corporations channeling CSR funds, BUMDes, MSEs, media outlets, employees, local communities, and consumers. However, the endeavor to nurture and intensify synergistic collaborations among stakeholders remains a continuous mission. For the progression of Kampong Reklamasi, the mantle of management has been entrusted to BUMDes. The linchpin of BUMDes' triumph lies in their ability to foster mining heritage-based tourism through a collaborative management system, effectively uniting relevant stakeholders. As the custodians of this tourist attraction, BUMDes bears the responsibility of its development, concurrently establishing a system of collaboration among stakeholders to channel a harmonious management approach that generates enduring economic value. In its practical implementation, the human resources steering this management endeavor are mandated not solely to exhibit managerial acumen but also to embody entrepreneurial competencies. These dual competencies transform them into the driving force that propels development, sparking innovative ideas and programs that materialize to accentuate the value proposition of tourism products and services. For future research, the impact of environmental issues should also be addressed to provide holistic results and to build environmentally sustainable mining heritage tourism.

Author contribution statement

The first author contributes to conceptualizing, analyzing, and interpreting the field data. The second, third, and the fourth authors assist the first author by compiling data from relevant references.

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