

## **Narrating of collaborative governance in Sejarah Beach restoration, Batu Bara Regency, Indonesia**

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### **Abstract**

*This article examines the collaborative governance strategy implemented by the Batu Bara Regency Government in restoring Sejarah Beach. Beaches are critical assets that represent the identity of a region, provide economic benefits, and support the surrounding environmental ecosystem. Unfortunately, many beaches experience environmental degradation and other socio-economic problems. Pantai Sejarah in Batu Bara Regency is no exception, which faces issues such as prostitution, environmental degradation, and local poverty. Using a qualitative methodology, this research explores the collaborative approach used in the revitalization of Pantai Sejarah. In-depth interviews were conducted with various key stakeholders, including representatives from local government agencies (Environmental Agency, Forestry Agency, and Regional Development Agency), PT Inalum's HR management, and local community members. The findings of this study show that the implementation of the collaborative governance approach by the local government has transformed Sejarah Beach into an integrated tourist attraction. In addition, this collaborative initiative also created economic opportunities, including small businesses, new jobs, and revenue for the government. The collaborative effort also addresses social issues such as prostitution through coordinated action between law enforcement, government, and the local community. Furthermore, the collaborative governance approach provides a comprehensive solution to coastal area management by addressing social challenges alongside environmental conservation and economic development.*

**Keywords:** beach revitalization, collaborative governance, sustainable development

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### **Introduction**

Beaches are not only cherished cultural sites but also vital natural assets for any region (Cristiano et al., 2020; Kovačić et al., 2020; Rolfe et al., 2021). Beyond being popular leisure destinations, they serve as reflections of a community's identity and history (Apriadi et al., 2018; E. Ellison & Brien, 2020). Unfortunately, numerous beaches face degradation due to various factors, such as pollution and overdevelopment (Chen et al., 2018). Sejarah Beach in Batu Bara Regency, situated on Sumatra's northern coast, confronts similar challenges regarding its shoreline. However, due to its proximity to industrial zones, unplanned development often leads to coastal abrasion, marine pollution, and declining water quality in this area (Popova et al., 2019; Zhai et al., 2020). These factors collectively jeopardize the sustainability of the coastal ecosystem and the existence of flora and fauna dependent on it (Jiboye et al., 2018; Matsushima & Ferreira, 2021). Moreover, the degraded condition of the beach contributes to a decline in tourism and gives rise to social problems, including prostitution and poverty among the local people. Therefore, a comprehensive approach is needed to overcome this

problem, as exemplified by the Batu Bara Regency government, which employs a collaborative approach involving cooperation with the private sector and community groups.

Among these challenges, the environmental degradation around Sejarah Beach warrants serious attention, as the area serves as a natural habitat for diverse species and ecosystems vulnerable to human activities. This area serves as a vital habitat for a wide array of species, including proboscis monkeys, colorful crabs, mudskippers, and numerous bird species, all of which rely on the ecosystem's integrity for their survival. Pollution from various sources, including littering and industrial discharge (Hu & Shen, 2021; Zeng et al., 2017), contributes to contaminating the water and soil, thereby harming marine life and vegetation in Sejarah Beach. Additionally, land reclamation activities in some industrial areas can disrupt the natural landscape of Sejarah Beach, leading to habitat loss for many species.

Government records indicate that from 1990 to 2010, beaches along Sumatra's northern coast experienced abrasion depths ranging from 5 to 15 meters (Kabupaten Batu Bara, 2011). Sejarah Beach itself has not been spared from this abrasion, with satellite imagery showing significant retreat in certain sections, averaging 5-8 meters. This abrasion has persisted since the 1970s and 1980s (Kabupaten Batu Bara, 2011). The situation is further compounded by severe damage to the mangrove ecosystem surrounding Sejarah Beach. Mangrove roots are frequently ensnared by plastic waste, impeding their growth and ecological functions (Das, 2020; van Bijsterveldt et al., 2021). Given that mangroves play a pivotal role in shoreline stability through their robust root systems and act as carbon sinks, their degradation exacerbates the beach's vulnerability to abrasion and other environmental pressures.

Therefore, it is crucial for the local government to promptly take proactive measures to conserve and restore the sustainability of Sejarah Beach in Batu Bara Regency. Considering the complexity of the challenges at hand, efforts for beach conservation and rehabilitation must be integrated and sustainable (J. C. Ellison, 2018; Lithgow et al., 2020). Effective environmental protection measures need to be implemented to address ecosystem damage while also considering local economic needs (Mullikin & Smith, 2002; Peng et al., 2020). Furthermore, increasing awareness and community participation in environmental preservation efforts are key to achieving success (Reyes-García et al., 2019; Wang & Tong, 2011). Thus, it is hoped that these collaborative efforts will bring positive benefits to the environment, economy, and the local community around Sejarah Beach.

However, managing and restoring a damaged beach is not a simple task, as it involves a multitude of complex factors (Corbella & Stretch, 2012; Dalyander et al., 2016). Moreover, the issue extends beyond ecosystem concerns; the prevalence of prostitution in the vicinity also poses a significant threat to visitor comfort and local well-being. Consequently, Sejarah Beach experiences a decline in visitors, resulting in stagnation in the surrounding economy. Adding to the challenge, budgetary constraints pose a major hurdle for the government. Beach management requires substantial funding for infrastructure repairs, conservation programs, and sustainable activities (Brockbank et al., 2020; Gittman et al., 2015; Kriesel et al., 2005). Unfortunately, the Batu Bara Regency government faces limitations in its budget, hindering its ability to make necessary investments. As a result, the government struggles to implement measures crucial for maintaining the beach's sustainability. In response, the local government is open to collaboration, including involving the private sector and the

surrounding community, to tackle these challenges and find innovative, sustainable solutions.

In their endeavors to revitalize Sejarah Beach, the Batu Bara Regency government has forged a collaboration with a private company, PT Inalum. This strategic partnership represents a key component of the Collaborative Governance approach, aimed at addressing the multifaceted challenges surrounding Sejarah Beach. Through this collaboration, various stakeholders—including government entities, private companies, and the local community—join forces to achieve common goals in restoring and revitalizing this environmentally and economically significant beach (Kana & Kaczkowski, 2019; Klijn, 2020). As a leading company in the Kuala Tanjung industrial area in Batu Bara regency, PT Inalum brings valuable contributions in terms of resources and technical expertise to the table. The collaboration, initiated in 2015 through its CSR unit, serves as a means for the company to fulfill its social responsibility by supporting sustainable development, including beach revitalization programs. By focusing on key issues such as prostitution, abrasion, and economic disparity, this 9-year collaboration program has successfully introduced several tangible solutions.

The concept of Collaborative Governance, wherein the government collaborates with various stakeholders, including local communities, non-governmental organizations or civil society organizations (CSO), and the private sector (Jugend et al., 2020; Lopes & Farias, 2022), serves as the foundation for this cooperation. By mobilizing all stakeholders, including government entities, businesses, and the community, beach revitalization efforts become more effective and sustainable (Bianchi et al., 2021). This approach underscores active participation from stakeholders across the public, private, and community sectors (Roengtam & Agustiyara, 2022; Rohlin, 2015) to address complex issues such as beach erosion, pollution mitigation, habitat restoration, and overall environmental conservation. Through forums, active participation, and a problem-solving focus, consensus can be reached to determine appropriate policies to tackle challenges (Buchheim et al., 2020; Kharazmi & Dartoomi, 2023). Moreover, focusing on collective problem-solving enables the identification of innovative and sustainable solutions (Massey & Johnston, 2015; Mukhlis & Perdana, 2022). For instance, in the case of Sejarah Beach, collaboration can lead to programs that not only enhance the coastal ecosystem but also empower the local community through training and employment opportunities related to beach management.

This article delves into the Collaborative Governance approach in the management and revitalization of Sejarah Beach in Batu Bara Regency. Recent developments in adaptive governance, particularly in response to climate change and environmental degradation, will be explored, emphasizing how these trends influence the roles of stakeholders such as the local government, private companies, and the community (Kalesnikaite, 2019; Kweyu et al., 2023). The evolving nature of public-private partnerships in environmental management, with a focus on sustainability and long-term benefits, will be examined alongside global examples of successful beach management (Pinz et al., 2021). A review of recent literature on coastal management, particularly on collaborative governance models, will provide insights into addressing coastal erosion, habitat restoration, and socio-economic disparities.

This article will analyze the collaborative governance activities in Sejarah Beach to draw lessons on managing issues like poverty, prostitution, and environmental degradation. Additionally, community engagement, along with new methodologies like participatory action research, will be highlighted for their potential to enhance collaborative efforts and community well-being. By integrating these aspects, the article

will offer a comprehensive overview of collaborative governance and coastal management, contextualizing the Sejarah Beach project within broader global trends. Furthermore, by presenting this information, the author aims to provide valuable insights into the importance of collaboration between the government and the private sector in tackling complex challenges, especially in coastal areas. Moreover, the author aims to highlight the potential of the Collaborative Governance approach in promoting sustainable and inclusive development, benefiting all stakeholders, including the environment, economy, and the local community.

### **Research Methods**

This study employs a qualitative research design to thoroughly examine the effectiveness of the Collaborative Governance approach in the revitalization of Sejarah Beach in Batu Bara Regency. The research was structured around key questions that aimed to understand how different stakeholders contributed to the project, the challenges they faced, and the outcomes of their collaborative efforts. Data were collected through a series of semi-structured interviews with 15 key stakeholders, including representatives from the local government, PT Inalum HR management, and members of the local community, conducted between January 20-30, 2024. The interviews were designed to capture detailed insights into the roles and strategies of each party involved in the project. Additionally, a comprehensive literature review was conducted to provide context and to draw comparisons with similar collaborative governance initiatives in beach management, thereby situating the Sejarah Beach project within a broader framework of environmental management practices.

The data analysis was conducted using a thematic analysis approach, which allowed for the identification and organization of key themes that emerged from the interview transcripts. These themes were closely aligned with the research questions, focusing on the contributions of stakeholders, the collaborative processes, the challenges encountered, and the outcomes achieved. The initial coding of the interview data was conducted using NVivo software, ensuring a systematic and rigorous approach to data organization. Themes such as "Stakeholder Engagement Strategies" and "Conflict Resolution Mechanisms" were developed iteratively, with constant comparison and refinement to ensure that they accurately represented the data. This process was further supported by data triangulation, where the findings from interviews were cross-referenced with the literature review and official documents, enhancing the credibility and validity of the analysis.

To provide a broader perspective on the effectiveness of the Collaborative Governance approach at Sejarah Beach, a comparative analysis was conducted with similar projects documented in the literature. This comparison not only highlighted the aspects of the Sejarah Beach project but also identified generalizable lessons that could be applied to other collaborative governance initiatives in environmental management. Potential biases in data collection, such as interviewer or respondent bias, were carefully mitigated through the use of standardized interview protocols, member checking, and peer debriefing sessions, which helped ensure the accuracy and reliability of the findings.

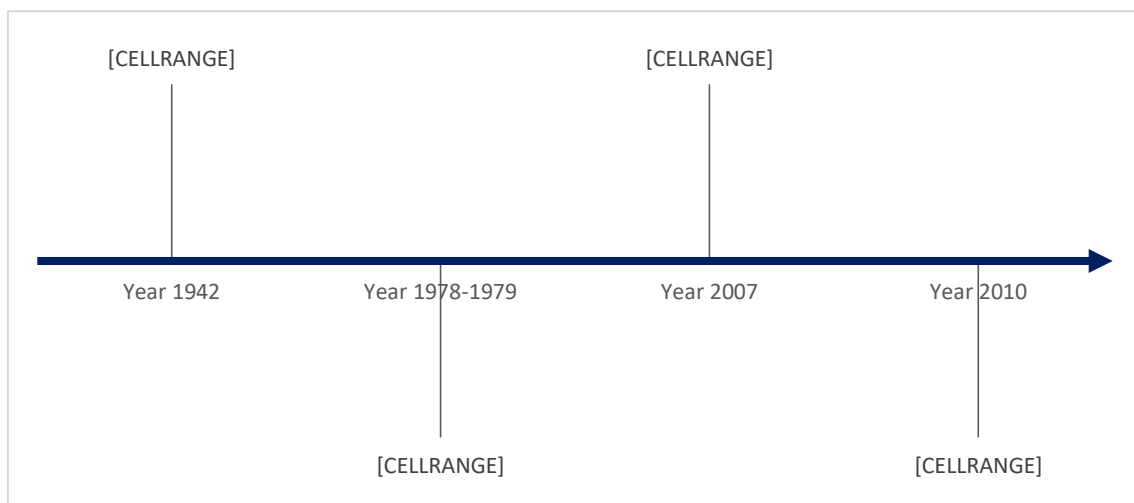
The final interpretation of the data involved synthesizing the thematic and comparative analysis to draw conclusions about the overall impact and effectiveness of the Collaborative Governance approach in the Sejarah Beach revitalization project. The results demonstrated the significant roles played by each stakeholder, the strategies they employed to overcome challenges, and the positive outcomes of their

collaboration. This study provides valuable insights into the dynamics of collaborative governance in environmental projects, offering practical lessons for similar initiatives and contributing to the broader discourse on sustainable management practices.

## Results and Discussion

### Tracing the History and Sustainability of Sejarah Beach Revitalization

Sejarah Beach, nestled in Perupuk Village, Lima Puluh District, Batu Bara Regency, North Sumatra Province, transcended its identity as merely a stretch of sand and seawater. Situated roughly 20 kilometers from the capital of Batu Bara Regency, this beach bore witness to significant events in the history of North Sumatra, and indeed, Indonesia as a whole. Instead, it stood as a historical nexus, weaving together poignant tales of the past. Its allure extended beyond its picturesque natural beauty, encompassing layers of history intricately woven into its fabric. To provide a clear overview of the historical and collaborative efforts in revitalizing Sejarah Beach, we present a timeline (Figure 1) that outlines key events and milestones from 1942 to 2010. This visual representation highlights the beach's transformation from a strategic military site during World War II to its status as a focal point for the mangrove conservation area.



**Figure 1.** Timeline of Historical Events and Initiatives

*Source: Government Institution's Performance Accountability Report Batu Bara Regency, 2010*

In 1942, it served as the initial landing site for Japanese forces in the region (Kabupaten Batu Bara, 2011). The strategic decision by Japan to utilize this beach as its point of entry underscored its pivotal role in its defense strategy (Muhajir et al., 2021). Even today, remnants of Japanese defense fortifications, once formidable shelters for soldiers against Allied forces, can still be glimpsed. The strategic significance of this beach stemmed not only from its favorable geographical positioning, directly facing the Malacca Strait but also from its natural conditions that provided a tactical advantage in battle (Putra, 2023; Rahmawati & Afif, 2023).

Sejarah Beach also mirrored the journey of evolution and adaptation that unfolded over the years. Following independence in 1945, this beach became a tourist destination for the local people (Faizal et al., 2023). With its green mangrove forests and several picnic facilities, it attracted a considerable number of visitors. However, significant changes occurred during the period of 1978-1979 when the beach was earmarked as the site for constructing permanent glass-roofed fishponds for breeding

purposes (Kabupaten Batu Bara, 2011). This initiative was endorsed by the North Sumatra Provincial Government of the time, with the aspiration of harnessing the natural resource potential of the beach. However, regrettably, the program fell short of its objectives. Upon completion of the construction, the permanent fishponds failed to yield the anticipated outcomes.

Consequently, these structures were abandoned and left to deteriorate. This abandonment gave rise to new challenges, including environmental degradation stemming from neglected building materials and the peril posed to marine fauna ensnared within. Following the collapse of the permanent fishpond project, the management of Sejarah Beach languished, receiving scant attention from stakeholders, particularly the government. The beach became increasingly polluted, its mangrove forests steadily receding each passing year, compounded by the proliferation of deleterious tourist activities such as prostitution and gambling dens. This relegated Sejarah Beach to a forsaken and polluted tourist destination, squandering its natural potential and inflicting adverse social repercussions on the local community.

As time passed, Batu Bara Regency emerged following the splitting of Asahan Regency in 2007, leading to the transfer of responsibility for managing Sejarah Beach to this newly formed administrative area. The local government expressed a keen interest in revitalizing the beach as a tourist destination. However, unfortunately, Sejarah Beach had already undergone significant deterioration. Accumulations of garbage, neglected facilities, and illegal settlements rendered the beach susceptible to various social and security issues. Furthermore, Sejarah Beach faced threats from extensive abrasion due to sand mining activities and sedimentation processes, exacerbating its environmental condition. Its proximity to the industrial zone of Kuala Tanjung also exposed it to environmental pollution from industrial waste. Collaborative efforts between the Housing, Residential Areas, and Environmental Agency (Disperkim-LH) of Batu Bara Regency and Sucofindo Laboratory revealed that certain industries around the Kuala Tanjung industrial zone, which discharge waste into the sea, were the primary contributors to this pollution (Disperkim-LH Batu Bara, 2012). Consequently, the marine ecosystem suffered significant damage, resulting in the loss of numerous marine organisms. This degradation extended to the Sejarah Beach coastline, exacerbating the destruction of mangrove forests.

Nevertheless, the challenges facing Sejarah Beach have spurred proactive measures by the local government. Since the establishment of the regency in 2007, the Batu Bara Regency Government has initiated several efforts to preserve and restore the environmental conditions surrounding the beach. One significant endeavor involves the construction of various tourism-supporting structures, including public toilet facilities, spacious parking areas, and comfortable pedestrian paths. These infrastructure developments aim to enhance the comfort and accessibility for visitors to the beach. Furthermore, the Batu Bara Regency Government designated Sejarah Beach as one of the key mangrove conservation areas in 2010, prioritizing it in their environmental conservation program.

In their commitment to conserving the mangrove and beach ecosystem, the Batu Bara Regency government has forged partnerships with local communities residing along the coastal area since 2007. Through the Forestry Agency, they have implemented a socialization program aimed at raising awareness about the importance of mangrove forest preservation. Notably, some individuals have shown interest in the program, seeking assistance in acquiring mangrove seedlings. These individuals, referred to as research informants, have highlighted several mangrove areas in their

vicinity suffering from land degradation for years. They demonstrated genuine concern and eagerness to further engage in mangrove restoration efforts. Following field surveys by the department, the government offered support in establishing mangrove nurseries, empowering local communities to independently undertake planting initiatives. As a result of this collaborative effort between the local government and the community, activities aimed at rehabilitating the mangrove ecosystem commenced with the planting of seedlings marking the initial steps toward restoring the degraded environmental quality.

However, the collaboration between the government and community groups in the effort to restore and manage Sejarah Beach faced several complex challenges. Despite various efforts to restore the mangrove forest ecosystem, progress appeared slow, and there was no significant change. The cumulative impact of environmental degradation and unregulated human activities positioned Sejarah Beach as one of the most severely affected beaches in Batu Bara Regency. Factors such as a lack of appreciation for environmental sustainability, irresponsible corporate conduct, insufficient funding for essential environmental restoration initiatives, and a lack of coordination among various stakeholders often impeded efforts toward the rehabilitation and conservation of the beach (Di Paola et al., 2018; Peña-Alonso et al., 2018). The challenges faced on this beach extended beyond ecosystem restoration efforts alone. As previously noted, concerns such as prostitution and economic inertia within the adjacent communities compounded the complexity of the situation. This highlighted the necessity for a more holistic and sustainable approach to addressing these issues. To achieve significant change, active collaboration between the government, community groups, and various other stakeholders was crucial.

A perspective on the effectiveness of the Collaborative Governance approach at Sejarah Beach can be drawn by comparing it with similar initiatives documented in the literature. Studies such as those by Berrone et al. (2019) and Zapatrina (2016) illustrate how collaborative governance can lead to successful outcomes when there is a robust engagement of stakeholders, clear roles and responsibilities, and sustained commitment to common goals. For instance, the collaborative restoration efforts at the Chesapeake Bay in the United States demonstrated the importance of involving diverse stakeholders, including government agencies, non-profit organizations, and local communities, in achieving comprehensive and enduring environmental improvements (Hood et al., 2021). Similarly, the restoration projects in the coastal regions of Thailand emphasized the need for continuous dialogue and adaptive management strategies to overcome challenges and achieve desired outcomes (Thompson, 2018). These comparative examples underscore the critical role of effective stakeholder engagement and the need for coordinated efforts to overcome challenges and drive successful environmental governance. In the context of Sejarah Beach, while the collaborative efforts have faced significant hurdles, the lessons learned from these comparative cases can offer valuable insights into refining strategies and enhancing the effectiveness of collaborative governance initiatives.

### **Collaboration between Government, Private Sector, and Local Community in *Sejarah Beach* restoration**

For the management and further restoration of Sejarah Beach, Batu Bara Regency has initiated involvement from the private sector to expedite the revitalization program. By engaging the private sector, particularly PT Inalum, a state-owned

company with a strong reputation and experience in the aluminum smelting industry, the local government has bolstered its capacity to accelerate the revitalization program. The genesis of this collaboration dates back to 2014 when the local government of Batu Bara Regency convened meetings with PT Inalum to explore the potential of the beach and assess its conditions. In these meetings, the government presented information about the beach's condition and stressed the importance of revitalization measures to preserve its ecosystem. PT Inalum, through its CSR team, responded by conducting field surveys to gain deeper insights into the actual condition of the beach and to contemplate potential revitalization efforts. Subsequently, in 2015, the outcomes of these meetings and field surveys culminated in the signing of a MoU between the local government, community groups, and PT Inalum. This MoU marked the inception of a more structured collaboration in beach revitalization endeavors. In this agreement, PT Inalum pledged to provide mangrove seedlings to local community groups as an initial step in the restoration of beach ecosystems. Additionally, they also committed to collaborating with the local government in the gradual protection and development of a 15-hectare mangrove forest area.

The following timeline delineates the key milestones in the restoration after the formation of the Batu Bara Regency:



**Figure 2.** Timeline of beach development and restoration efforts after the formation of Batu Bara Regency.

Source: *Government Institution's Performance Accountability Report Batu Bara Regency, 2023*

Mangrove forests play a pivotal role in the recovery process of beaches, serving as a crucial foundation for coastal ecosystem sustainability. Since 2015, PT Inalum and the local government have been actively promoting and supporting periodic mangrove planting programs along the coast. This collaborative effort also involves local residents, who are the main driving force behind mangrove planting activities. A significant milestone was achieved in 2016 with the enactment of regulations pertaining to forestry and social matters. These regulations allowed community groups to manage forests with direct permission from the Ministry of Environment and Forestry. Azizi, one of the informants, played a crucial role in encouraging nearby residents to establish the *Kelompok tani Cinta Mangrove* (KTCM) with the aim of applying for social forestry business permits under the Community Forest scheme. Subsequently, in 2018, a social forestry management permit was issued for a duration of 35 years, covering an area of 456 hectares, including the villages of Gambus Laut and

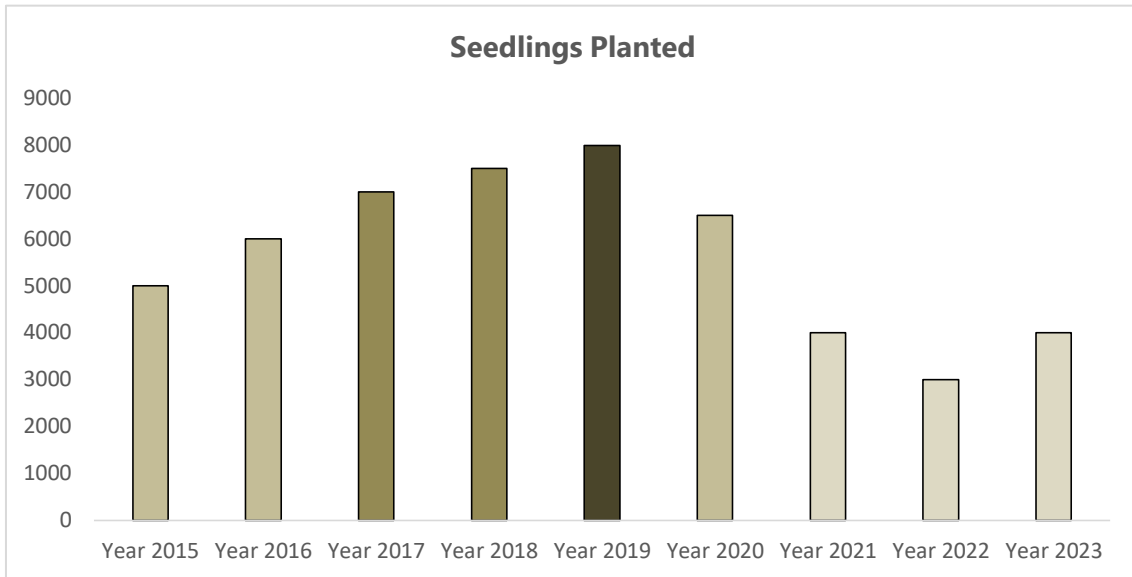


Perupuk. This permit provided KTCM with official recognition from the state to engage in mangrove conservation and broader forest management activities. Moreover, through this group, mangrove seedling assistance from both the government and companies can be distributed in a more organized manner.

One of the proactive steps taken by KTCM to ensure the sustainability of their activities is to involve the Batu Bara Police Resort in mangrove rehabilitation activities. The participation of the Batu Bara Police Resort underscores their commitment to law enforcement and environmental protection. By involving the police, supervision and security around the mangrove area can be enhanced, thereby deterring vandalism, theft of mangrove seedlings, or other illegal activities that could harm the mangrove ecosystem. Additionally, efforts have been made to remove illegal stalls, resulting in Sejarah Beach becoming more orderly and tidy, consequently leading to an increase in tourist visits. Through collaboration with the police, irresponsible tourism operators will be effectively deterred, ensuring the continuity of coastal ecosystem rehabilitation efforts.

After nearly a decade of collaboration, the mangrove conservation partnership between the local government, community groups, and PT Inalum has yielded promising results. Efforts to preserve and expand the mangrove forest have been successful, maintaining an existing area of 15 hectares and gradually adding planting areas of 5 hectares within this region. Consequently, the long-damaged coastal ecosystem is undergoing gradual restoration, marked by the return of marine animals and birds, which serve as important indicators of ecosystem health. Moreover, Sejarah Beach has emerged as a focal point for mangrove forest conservation in Batu Bara Regency. In addition to providing essential ecological benefits, mangroves also play a crucial role as effective CO<sub>2</sub> absorbers, capable of absorbing up to 871.9 tons of CO<sub>2</sub> per hectare per year (Duarte, 2017; McLeod et al., 2011; Ray & Jana, 2017). This highlights the significance of mangroves in mitigating the impacts of climate change, making them valuable assets in global climate change mitigation efforts.

Throughout the program period from 2015 to 2023, several significant achievements have been realized through this collaboration. Notably, a total of 51,000 mangrove seedlings (*Rhizophora Stylosa*) have been planted, symbolizing a significant commitment to bolstering the coastal ecosystem (Disperkim-LH, 2023). The majority of these seedlings were generously donated by Inalum, with additional contributions from The Environment and Forestry Agency of Batu Bara Regency. Furthermore, some seedlings were sourced from their nurseries, which have been successfully established and maintained by local farmers (KTCM). This collaborative effort underscores the dedication of all stakeholders involved in the restoration and preservation of Sejarah Beach and its surrounding mangrove forests. Below is detailed planting data for the mangrove seedlings.



**Figure 3.** Mangrove Seedlings Planted (2015-2023).

*Source: Report of the housing and settlement office-Environment of Batu Bara, 2023*

Furthermore, in 2022, PT Inalum established a mangrove seedling center in collaboration with KTCM, demonstrating proactive steps towards sustainable mangrove management. The initiative incurred assistance costs ranging from 50 to 100 million rupiah. Together with the *Ikatan Mahasiswa Batu Bara* (IMABARA), they built facilities to facilitate community education and engagement on environmental conservation. Moreover, in 2023, PT Inalum contributed to the construction of bird observation towers, a crucial initiative in preserving coastal biodiversity. Additionally, efforts were initiated to support fish farming in tarpaulins (biofloc) as a sustainable economic alternative, alongside providing solar panels to reduce reliance on conventional energy sources. These efforts aimed to not only address immediate challenges but also foster long-term prosperity and ecological balance in the region.

Over time, the collaborative effort to revitalize Sejarah Beach has evolved to encompass more than just marine and coastal ecosystem restoration. It now includes the development of the Batu Bara Mangrove Park (BBMP) as part of local economic enhancement initiatives. The renaming of Sejarah Beach to Batu Bara Mangrove Park in 2023 holds significant meaning, reinforcing the identity and purpose of the area's development. This change reflects a commitment to promoting environmental preservation while tapping into the sustainable tourism potential of Sejarah Beach. By prioritizing the development of eco-friendly tourism and coastal conservation sectors, this collaboration has successfully fostered synergy between the resources of the Batu Bara local government and the financial, technical support, and expertise from the private sector (Inalum).

In this context, cooperation among various sectors such as Government Agencies, the private sector, and local communities becomes crucial in addressing the challenges. For instance, the Fisheries and Marine Affairs Agency plays a pivotal role by assisting in the construction of docks and other supporting infrastructure to improve accessibility and enhance tourist experiences at the BBMP. Additionally, the Forestry Department contributes to mangrove forest preservation and coastal ecosystem rehabilitation through mangrove seedling assistance and other conservation efforts. The local government through the Tourism and Public Works Agency also play a

significant role in creating more tourist infrastructure such as toilets, drilled wells, lesehan seating, and some photo spots.

On the other hand, Inalum makes significant contributions through eco-tourism and conservation programs by sharing knowledge. For instance, the company's HSE department promotes the effectiveness of mangrove planting as part of environmental conservation efforts. For example, they conduct workshops and training sessions to educate local communities on proper mangrove planting techniques and the importance of preserving coastal ecosystems. Additionally, Inalum collaborates with environmental organizations to organize educational tours and field trips to the Mangrove Park, where participants learn about mangrove ecology and conservation firsthand. Furthermore, employees with civil engineering backgrounds participate in landscape planning and tourist destination development to create engaging experiences for visitors. Additionally, the roles of the Public Relations and IT departments of the company are crucial in digitally promoting tourist destinations. By leveraging technology and digital marketing strategies, they can effectively communicate the uniqueness and appeal of the Batu Bara Mangrove Park to a wider audience, thus increasing tourist visits and raising awareness of the importance of environmental preservation.

In addressing the issue of prostitution, the government takes firm action by collaborating with Satpol PP and the Batu Bara Police Resort to eradicate prostitution practices in the area. Strict measures are implemented, including conducting frequent raids and crackdowns on stalls or locations known to facilitate prostitution activities. Areas identified as hubs for prostitution are swiftly demolished to deter further illegal activities. These decisive actions began in 2013 and were intensified in 2016 to ensure the effective enforcement of laws and the protection of the community from such harmful practices. In addition to collaborating with law enforcement agencies, the government implements comprehensive rehabilitation programs aimed at providing alternative livelihood opportunities for individuals involved in prostitution. These programs offer vocational training, job placement assistance, and counseling services to help individuals transition away from the sex trade and reintegrate into society. Furthermore, the government works closely with community organizations and NGOs to raise awareness about the harmful effects of prostitution and provide support services to those affected, including victims of human trafficking.

Meanwhile, in the field of local economic development, the local government is actively engaged in training programs aimed at bolstering the economy of tourist villages. These initiatives encompass various activities, including the organization and renovation of slum houses around Sejarah Beach, a key tourist destination. Additionally, efforts are made to facilitate the production of tents and carts for local vendors. Collaboration in this endeavor is conducted with Inalum, which offers support and resources to implement these programs effectively. Through cooperation with relevant parties, the government not only endeavors to address social issues such as prostitution but also seeks to fortify the local economy, thereby promoting development and enhancing the welfare of the local community.

To provide a clear understanding of the stakeholders and their roles, the following table summarizes the contributions of each party. In (Table 1), I detail the roles and contributions of key stakeholders involved in the restoration efforts, underscoring the collaborative nature of the initiative.

**Table 1.** Stakeholder Roles and Contributions

No	Stakeholder	Role/Contribution
1	Local Government	Regulation, coordination, and infrastructure support
2	PT Inalum	Financial support, technical expertise, seedling provision
3	Local Community (KTCM)	Mangrove planting, local engagement, and management of social forestry permits
4	Police (Satpol PP)	Security, law enforcement, environmental protection
5	Environmental Department	Mangrove seedling assistance, conservation efforts
6	Forestry Department	Mangrove forest preservation, ecosystem rehabilitation
7	Sucofindo Laboratory	Environmental assessment and pollution monitoring

*Source: processed by the author, 2024*

The beach revitalization program, executed through cross-sectoral and interdisciplinary collaboration, underscores an understanding of the complexity of the tourism industry, which demands an integrated approach. This collaboration highlights the significance of cross-sectoral cooperation and active participation from all stakeholders, including government, communities, and the private sector (Graci, 2013; Grootjans et al., 2022; Liburd, 2018). By adopting this approach, decisions, and policies are not only collectively made but also implemented with consideration for the needs and aspirations of all involved parties (Hafer et al., 2022; Jumanah et al., 2022; Stout & Love, 2021). The importance of power and responsibility sharing among the government, communities, and the private sector forms the cornerstone of this collaboration (Ansell & Gash, 2008; Bianchi et al., 2021). Through collective effort, they can leverage the resources and expertise of each party to achieve common goals in beach management and restoration. Indeed, the efficacy of this initiative critically depends on the comprehensive backing from all strata of society. Through steadfast collaboration among governmental bodies, corporate entities, and local communities, the Sejarah Beach revitalization program perseveres with the objective of effecting enduring positive transformations in environmental stewardship, economic vitality, and community welfare.

### **The success of Collaboration for Coastal Conservation and Economic Empowerment**

Sejarah Beach, now known as Batu Bara Mangrove Park (BBMP), has emerged as a focal point and an attractive tourist destination in this regency. This name change signifies a significant transformation in the management and utilization of the coastal area. With a focus on mangrove ecosystem rehabilitation and sustainable tourism development, BBMP has become a magnet for visitors from various backgrounds. Through a combination of natural beauty, mangrove ecosystem diversity, and a strong commitment to conservation efforts, BBMP serves as an inspiring example of how collaborative coastal area management between the local government, private sector, and community can yield significant positive impacts on the local community. The collaboration has resulted in significant positive impacts on the local economy. The cumulative income from tourist visits can reach Rp 910 million per year, indicating a substantial contribution from the tourism sector as a major revenue generator for the region (see Table 1). Furthermore, through this revitalization program, approximately 70 new MSMEs have emerged in BBMP, providing significant economic opportunities for the local community. With potential daily earnings reaching Rp 150-200 thousand, these MSMEs not only directly contribute to the welfare of their respective households but also create new job opportunities. With the growth of MSMEs, the local community

has the opportunity to increase income and directly benefit from the tourism development in BBMP. This not only drives the economy at the individual level but also provides impetus for broader economic growth in the region. The growth of tourism in BBMP has also created new job opportunities as tourism managers. Currently, there are over 40 people working as BBMP tourism employees.

**Table 2.** Economic Contributions from BBMP Tourism

No.	Metric	Value
1.	Annual Tourism Income	Rp 910 million
2.	Number of New MSMEs	70
3.	Potential Daily Earnings per MSME	Rp 150-200 thousand
4.	Total BBMP Tourism Employees	40
5.	Batik Crafting Group Members	20
6.	Tunjang Mangrove Group Members	15
7.	Silvofishery Group Members	20
8.	Average Daily Visitors (Regular)	100
9.	Average Daily Visitors (Weekend)	1,500-2,000
10.	Peak Visitors on Holidays	5
11.	Estimated Daily Workers	120+

*Source: in-depth interview processed by the author*

Additionally, there are also groups such as the Batik Crafting Group consisting of 20 people, 15 people in the Tunjang Mangrove Group, and 20 people in the Silvofishery Group, as a result of collaboration. It should also be noted that there are daily workers hired when visitor numbers increase or on holidays. There are at least around 120 daily workers, or even more, benefiting directly from the presence of BBMP. Thus, the Sejarah Beach revitalization program, initiated since 2015, has not only created a successful tourist destination but also served as a catalyst for sustainable local economic development, providing job opportunities, and significantly improving the welfare of the local community. Their involvement in the tourism industry not only provides financial benefits for the government but also stimulates the local economy. With tourist spot, the surrounding community has even more opportunities to increase their income and engage in environmentally friendly economic activities.

Regarding the tourism sector, recorded visitation data since 2020 provides a clear picture of the positive impact of this revitalization program. On regular days, an average of 100 visitors enjoy the natural beauty and facilities available at BBMP. However, when the weekend arrives, the number of visitors can significantly increase to touch figures of 1,500 to 2,000 people. Even on holidays and special occasions, the number of visitors can peak with a total of 5,000 people. The trend of increasing visitor numbers indicates that BBMP is becoming increasingly popular as an attractive and environmentally friendly eco-tourism destination. This once again reflects the success of collaborative efforts between the local government, companies, and the local community in managing and promoting sustainable tourism destinations while also focusing on environmental conservation.

### **Contributions and Challenges Faced by Each Stakeholder**

The revitalization of Sejarah Beach in Batu Bara Regency serves as a significant case of collaborative governance, where the combined efforts of government, private sector, and local community aimed to address environmental degradation, social issues, and economic disparity. The Batu Bara Regency Government played a crucial role in

initiating and driving the revitalization of Sejarah Beach. Their contributions were multi-faceted, focusing primarily on infrastructure development and regulatory support. The government, through various departments, facilitated the construction of essential public facilities such as toilets, parking areas, and pedestrian paths, which were necessary to accommodate the influx of tourists and improve the overall accessibility of the beach. Additionally, the Forestry Department, Tourism Agency, and Public Works Agency collaborated to promote eco-tourism and support mangrove conservation efforts by providing the necessary permits and resources like mangrove seedlings.

However, the government's efforts were not without challenges. One of the most significant obstacles was inadequate funding for the environmental restoration projects. Despite their commitment, the lack of sufficient financial resources limited the scope and effectiveness of the initiatives. Furthermore, the government's ability to implement and sustain these efforts was hindered by poor coordination among different agencies. Bureaucratic hurdles often slowed down the decision-making process, causing delays in the execution of key projects. Moreover, addressing the social issues in nearby communities, such as prostitution and economic stagnation, required a more comprehensive approach beyond mere environmental restoration, adding another layer of complexity to the government's role in the collaboration.

On the other side, PT Inalum, a state-owned company, significantly contributed to the revitalization efforts through its Corporate Social Responsibility (CSR) programs. The company's involvement was instrumental in the environmental aspect of the project, particularly in mangrove conservation. PT Inalum provided mangrove seedlings and established a mangrove seedling center, which became a critical resource for reforestation efforts. They also funded the construction of bird observation towers and fish farming facilities, which not only enhanced the eco-tourism potential of Sejarah Beach but also supported the local economy. Furthermore, PT Inalum's expertise in landscape planning and digital promotion played a vital role in attracting tourists and raising awareness about the conservation efforts.

Despite these significant contributions, PT Inalum faced its own set of challenges. One of the primary difficulties was aligning their corporate goals with the environmental and social needs of Sejarah Beach. While their CSR initiatives were well-intentioned, integrating these efforts with the broader community and ensuring they addressed the local needs required careful planning and ongoing communication. Additionally, the sustainability of these initiatives posed a challenge, particularly in maintaining long-term involvement. Ensuring that the projects were not just short-term fixes but had lasting impacts required continuous effort and overcoming local resistance or skepticism towards corporate involvement.

Meanwhile, the local community, represented by groups such as Kelompok Tani Cinta Mangrove (KTCM), was central to the success of the revitalization project. Their contributions were primarily in the realm of mangrove planting and conservation, which were crucial for the environmental restoration of Sejarah Beach. The community's active participation in reforestation efforts ensured that the initiatives were locally driven and had a greater chance of long-term sustainability. Additionally, their involvement in securing social forestry permits was instrumental in legitimizing and protecting the conservation efforts.

However, the local community faced significant challenges that impeded their ability to contribute more effectively. One of the primary challenges was limited resources and knowledge in effective environmental management. While their enthusiasm for the project was undeniable, the slow progress in mangrove restoration

highlighted the need for ongoing support and capacity building. Additionally, the community struggled with social issues such as economic disparity and illegal activities like prostitution and gambling. Addressing these issues required more than just environmental efforts; it necessitated comprehensive community engagement and social interventions, which were beyond the immediate capacity of the local community.

Nevertheless, the collaboration between the government, PT Inalum, and the local community exemplifies a multi-stakeholder approach that effectively leverages the strengths of each party. The government provided essential regulatory support and infrastructure, PT Inalum contributed financial and technical assistance, and the local community ensured grassroots involvement and execution. This synergy was crucial in addressing the multifaceted challenges of the revitalization project. Overcoming the challenges faced by each stakeholder required continuous dialogue and strategic adjustments. For instance, the establishment of the mangrove seedling center by PT Inalum was a direct response to the slow progress in reforestation, demonstrating the company's commitment to adapting its efforts to meet the project's needs. Similarly, the government's collaboration with Satpol PP and the Police Resort to address prostitution around Sejarah Beach showcased a more holistic approach to revitalization, one that extended beyond environmental restoration to tackle social issues. Additionally, involving law enforcement agencies ensured better protection of the mangrove areas, reducing illegal activities that could undermine conservation efforts.

## **Conclusion**

The collaborative governance approach adopted in the revitalization of Sejarah Beach, now Batu Bara Mangrove Park (BBMP), has demonstrated its effectiveness in addressing the multifaceted challenges faced by coastal areas. By bringing together the government, private sector, and local community, this collaborative effort has achieved remarkable progress in transforming Sejarah Beach into a vibrant and sustainable tourist destination. Through a comprehensive strategy that integrates mangrove ecosystem restoration, sustainable tourism development, and community empowerment, significant strides have been made in enhancing the environmental integrity of the coastal area while simultaneously stimulating economic growth.

The collaborative efforts have resulted in the rehabilitation of mangrove forests, which serve as vital habitats for diverse species and contribute to shoreline stability and carbon sequestration. Moreover, the promotion of sustainable tourism practices has not only attracted visitors to BBMP but has also generated economic opportunities for the local community. The emergence of new MSMEs and job opportunities in tourism-related sectors has bolstered local livelihoods and contributed to the overall prosperity of the region. Moreover, the increase in tourist visits to BBMP reflects its growing popularity as an environmentally friendly and socially responsible destination. Furthermore, the collaborative approach has facilitated effective management of social issues such as prostitution through concerted efforts between law enforcement agencies, government initiatives, and community rehabilitation programs. By addressing these social challenges alongside environmental conservation and economic development, the collaboration has fostered a holistic approach to coastal area management.

Overall, the successful revitalization of Sejarah Beach into BBMP serves as a valuable example of the potential of collaborative governance models in achieving

sustainable and inclusive development. Moving forward, further research and action are needed to monitor and enhance the long-term sustainability and resilience of BBMP, ensuring continued benefits for the environment, economy, and local community. Additionally, efforts should focus on replicating this collaborative model in other coastal areas facing similar challenges, thereby contributing to broader coastal conservation and sustainable development initiatives.

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