

POLICY MODEL FOR POST-MINING VILLAGE DEVELOPMENT GOVERNANCE TO ACHIEVE THE SUSTAINABLE DEVELOPMENT GOALS (SDGS) IN BANGKA REGENCY

Zamzani^{1a*}, Alfitri^{2b}, Andries Lionardo^{3c}, Abdul Nadjib^{4e}

¹²³⁴ Universitas Sriwijaya, Palembang, Indonesia

^a babelzamzani@gmail.com

^b alfitri@fisip.unsri.ac.id

^c andrieslionardo@fisip.unsri.ac.id

^d abdulnadjib@fisip.unsri.ac.id

(*) Corresponding Author

babelzamzani@gmail.com

ARTICLE HISTORY

Received : 20-05-2026

Revised : 13-06-2026

Accepted : 30-06-2026

KEYWORDS

public policy;
governance;
post-mining village;
governance network;
Village SDGs;
sustainable
development;

ABSTRACT

This study examines policy and governance in post-mining village development to support the Sustainable Development Goals (SDGs) in Bangka Regency. Using a qualitative case study approach, data were collected through in-depth interviews, observations, and document analysis involving government officials, village leaders, facilitators, community representatives, beneficiaries, and mining companies. Data were analyzed using the Miles, Huberman, and Saldaña interactive model. The findings indicate that post-mining village development has progressed through the stages of agenda setting, formulation, adoption, and implementation. However, implementation remains suboptimal due to the absence of a comprehensive policy specifically regulating post-mining village development. Governance practices reflect actor interdependence, resource exchange, shared rules, and network autonomy, but are constrained by weak coordination, limited institutional capacity, dependency on corporate support, and insufficient environmental integration. Supporting factors include government commitment, community participation, village facilitators, Village SDGs, CSR programs, and social capital. The study proposes the Collaborative Sustainable Post-Mining Village Governance (CSPMVG) Model, integrating policy processes, collaborative governance, and sustainable development principles.

This is an open access article under the CC-BY-SA license.



INTRODUCTION

Poverty alleviation is a key global development agenda formulated in the *Sustainable Development Goals* (SDGs), with the first goal being “No Poverty.” This agenda was established by the *United Nations* as a framework for sustainable development through 2030, emphasizing the integration of economic, social, and institutional aspects into public policy. From a public administration perspective, the SDGs are not merely understood as development targets but as global public policy instruments requiring institutional adaptation at the national and local levels (Simanjuntak et al., 2024).

The paradigm of village development has shifted from a *top-down* approach toward a participatory, collaborative, and sustainability-based *governance* approach (*sustainability governance*). Since the implementation of the village fund

policy and the strengthening of village autonomy, villages are no longer positioned as objects of development but as subjects of development. This transformation demands that village governance be adaptive, accountable, and innovative in designing local development policies aligned with SDG indicators. However, in public administration practice, the implementation of village development still faces various structural challenges, including limited institutional capacity at the village level, policy misalignment between central and local governments, weak integration of SDG-based data planning, and a lack of contextually appropriate models for village development governance (Ardiawanti et al., 2025).

These conditions indicate that the success of Village SDGs is not solely determined by the size of the budget, but rather by the quality of *governance*, the capacity of the village bureaucracy, and the effectiveness of public policy implementation at the local level. The prevailing trend has been that the preparation of village planning documents (RKPDs, APBDs, RPJMDs) has not yet integrated the Village Development Index (IDM) targets and *Sustainable Development Goals* (SDGs) indicators into the village planning cycle, but continues to rely on the results of community consensus deliberations at the village level. Meanwhile, Ministry of Village Affairs Regulation No. 8 of 2021 provides guidelines and direction for village governments to ensure that village development plans are integrated with the Regional Medium-Term Development Plan (RPJMD) and the National Medium-Term Development Plan (RPJMN). One of the key points stipulated in this regulation is the alignment of IDM targets and SDG indicators with village development plans, particularly regarding poverty alleviation policies (Dwiyantri et al., 2025).

Researchers currently observe that this lack of alignment is occurring in villages across Bangka Regency, prompting their interest in conducting a more in-depth study—particularly regarding village governance in poverty alleviation programs for rural communities, especially in post-mining villages. The question that arises is: in relation to updating the status of village progress and self-reliance, what are the opportunities for each village to implement its SDG targets at the grassroots level? What are the mechanisms for monitoring and evaluating the achievement of SDG targets, taking into account all the conditions and challenges faced? It is important to note that one of the main challenges related to the implementation of a commitment is the issue of planning and budgeting, which often still faces many obstacles on the ground (Dzulqarnain et al., 2022).

Law No. 6 of 2014 on Villages represents the government's effort to achieve equitable and just general welfare, aimed at serving as a legal foundation for improving the standard of living and well-being of village residents through the expansion of village authority in policy and budgeting. Several village authorities have gained recognition, both based on inherent rights and local scale (scope), and have become a new strategy in development (Usman et al., 2024). The implementation of this regulation has led to changes in village governance, granting village governments greater autonomy in decision-making beyond state influence. As the smallest unit of government administration, village governments have the right to plan for the development and empowerment of the village community, thereby playing a crucial role in the process.

To realize and accelerate development in villages, the central government allocates village funds sourced from the State Budget (APBN), the amount of which continues to increase year by year. Village funds are funds allocated to all villages in Indonesia. The amount of village funds is determined based on four factors, namely the population of a village, the village's poverty level, the village's land area, and the village's geographical difficulty level (Sutrisno et al., 2026). Villages that receive village funds have the opportunity to manage village development and community empowerment autonomously, and if used intensively and effectively, this can drive improvements in the standard of living and well-being of the village community. To determine the benefits of using village funds for successful development in villages, a measurement method is required.

Ministry of Villages, Development of Disadvantaged Regions, and Transmigration Regulation No. 2 of 2016 outlines the Village Development Index (IDM), which serves as a benchmark for determining a village's development status. The IDM is composed of three indicators: the Social Resilience Indicator (IKS), the Economic Resilience Indicator (IKE), and the Environmental Resilience Indicator (IKL). These indicators assist the government in identifying village development challenges to achieve self-reliant villages and eradicate underdeveloped villages, ultimately aimed at supporting the achievement of priority development targets in the National Medium-Term Development Plan (RPJMN 2014–2019), namely the eradication of 5,000 underdeveloped villages and the enhancement of at least 2,000 self-reliant villages (Yudanto et al., 2024).

Based on the researcher's understanding of the current state of village development in Bangka Regency, village development programs remain monotonous; for instance, the researcher frequently observes that development efforts are often limited to the repetitive construction of wells, boreholes, footpaths, and physical infrastructure—carried out

repeatedly without proper maintenance—resulting in no significant impact on village community development. Consequently, these villages are deemed stagnant, development is unsustainable, particularly regarding the concepts of human resource development and the village economy; the researcher’s perspective on these areas remains far from what is expected. This also pertains to rural administration, specifically regarding the role of village officials in service delivery, which is similarly far from what is expected.

The Village Law mandates that village budgets sourced from the State Budget (Village Funds) be calculated based on the number of villages and allocated by considering population size, poverty rates, land area, and geographical difficulty levels, with the aim of improving welfare and equitable village development. However, currently 90 percent of village funds are distributed equally as a base allocation, while 10 percent is distributed based on four variables. The four (4) variables in question are: (1) the number of poor households, (2) the level of education, (3) the area size, and (4) the population in that area. Analysis results indicate that the village fund formula may contribute to increased inequality, given the significant diversity among villages across regions, even within a single region or province (Shu et al., 2023).

The focus of public administration is limited to issues of organization, personnel, and budgeting within the bureaucracy and government; politics and policy are the substance of political science. The locus of this paradigm is to question where public administration should stand today, clearly distinguishing between administration and state politics. This phase is marked by the book written by Frank J. Goodnow and Leonard D. White titled **Politics and Administration**, which argues that there are two distinct core functions of government: politics and administration. It is further noted that, according to Goodnow, public administration should be centered on the government bureaucracy.

The formulation of the 2024–2026 Regional Development Plan for Bangka Regency was conducted using a *“money follows program priority”* budgeting approach, taking into account thematic, holistic, integrative, and spatial planning. It also remains focused on strategic development issues that remain challenges in the short and medium term. Regional issues have influenced the success or failure of regional development performance in the past, making them a key focus. Regional issues are the primary challenges that must be prioritized for resolution. A regional issue is considered a priority if it relates to development goals and targets, as well as other mandatory priorities of national or provincial policies. The fundamental regional development issues that will be the main agenda to be addressed by the Bangka Regency government during the 2024–2026 period include the areas of General Government Administration, Human Resource Development, Infrastructure, Economy, and the Environment.

Based on these issues, research is needed on the Policy Model for Post-Mining Village Development Governance to Achieve the SDGs in Bangka Regency. This will reveal the progress made toward achieving the SDGs, as measured by the Village Development Index, particularly regarding poverty alleviation. This study focuses on policies and governance in post-mining village development to achieve the Sustainable Development Goals (SDGs) in Bangka Regency. The research problem formulation covers three main aspects: analysis of policies and governance in post-mining village development; identification of factors supporting and hindering policy implementation; and development of an effective policy model to support sustainable village development in post-mining areas.

The research aims to analyze policies within the governance of post-mining village development, identify factors influencing both the success and obstacles to their implementation, and develop a policy model capable of strengthening the achievement of the SDGs in Bangka Regency. Through these objectives, the research is expected to generate conceptual and practical recommendations for managing village development that is more sustainable, inclusive, and adaptive to the conditions of post-natural resource exploitation areas.

Theoretically, this study is expected to contribute to the development of public administration, particularly in the fields of public policy, governance, and sustainable development. This study enriches the understanding of the relationship between village development policies, post-mining governance, and the achievement of the SDGs through the involvement of the government, the private sector, and the community. Additionally, this study has the potential to develop a conceptual model of post-mining village development governance that integrates economic, social, and environmental aspects as a reference for further research and the strengthening of theories on policy implementation and governance in post-mining areas.

METHOD

This study employs a qualitative approach using a multiple case study design grounded in a constructivist paradigm to deeply understand post-mining village development policies based on the Sustainable Development Goals (SDGs) in poverty alleviation within Bangka Regency. The research locations include Air Anyir Village, Rebo Village, and Riding Panjang Village, which were purposively selected because they possess the characteristics of post-tin mining villages and have implemented the Village SDGs program. The research focuses on analyzing SDG-based village development policies, factors supporting and hindering policy implementation, and the development of a post-mining village development policy model oriented toward sustainable development (Hendren et al., 2023).

Data sources consist of primary and secondary data. Primary data was obtained through in-depth interviews, field observations, and documentation with informants selected using purposive and snowball sampling techniques, including representatives from the Department of Community and Village Empowerment, the Regional Development Planning Agency (Bappeda), village governments, Village Councils (BPD), village facilitators, community leaders, youth leaders, community business groups, and mining company representatives. Secondary data was obtained from development planning documents, Village SDGs data, poverty data, laws and regulations, village development evaluation reports, and various relevant scientific publications.

Data analysis was conducted interactively using the Miles, Huberman, and Saldaña model, which includes data condensation, data presentation, and the drawing and verification of conclusions. The analysis process was aimed at identifying policy patterns and factors influencing implementation, as well as formulating an SDG-based post-mining village development policy model. Data validity was ensured through triangulation of sources, methods, and time, accompanied by member checking, audit trails, and in-depth contextual descriptions to guarantee the credibility, reliability, transferability, and confirmability of the research findings.

RESULTS AND DISCUSSIONS

Public Policy Findings: The Dimension of Post-Mining Village Development Policy Agenda Formulation

The research results indicate that the process of formulating the post-mining village development policy agenda in Bangka Regency has not yet been fully based on the actual needs of mining-affected village communities. The development agenda remains largely influenced by the program priorities of local and central governments, which are then translated into village planning documents. This situation results in some specific post-mining community needs not being optimally accommodated within the village development agenda. A representative from the Bangka Regency Community Empowerment and Village Development Agency stated:

"In principle, the formulation of the village development agenda is based on the Regency's Medium-Term Development Plan (RPJMD), national policies, and the Village SDGs. Sometimes, there are indeed villages that have not yet been able to specifically identify post-mining development needs, so the programs formulated remain general in nature" (in-depth interview X1, 2026).

A similar statement was made by a representative from the Bangka Regency Development Planning Agency (Bappeda), who stated:

"The village development agenda must align with regional planning; however, post-mining issues have not yet fully become a priority agenda in every village because their characteristics and the extent of their impacts vary" (in-depth interview, X2, 2026).

Meanwhile, based on observations at several Village Development Planning Deliberation (Musrenbangdes) forums, the researcher found that discussions regarding the utilization of former mining land, the development of alternative economies, and environmental rehabilitation still received a relatively small share compared to the village infrastructure development agenda. An analysis of Village Medium-Term Development Plans (RPJM Desa) and Village Annual Work Plans (RKP Desa) indicates that the majority of development programs remain focused on physical infrastructure such as neighborhood roads, drainage systems, and public facilities, while post-mining economic transformation and environmental rehabilitation have not yet become top priorities.

Research findings indicate efforts by local and village governments to integrate post-mining development issues into the Village SDGs agenda. This is evident from the inclusion of community economic empowerment programs, SME development, food security, and environmental management in village planning documents. A village head representative stated:

"For years have we started incorporate community business development programs, aquaculture in former mining pits, and food security as part of the village's SDG targets" (in-depth interview D1, 2026).

A similar point was also raised by the informant representing the Chair of the Village Consultative Body (BPD), who stated:

"During the discussion of the Village Medium-Term Development Plan (RPJM), we advocated that development should not only focus on infrastructure but also on the utilization of former mining sites for community economic activities" (in-depth interview B1, 2026).

Meanwhile, the researcher's observations indicate that several villages have developed programs to utilize former mining pits as areas for freshwater fish farming and village tourism. These programs are linked to the achievement of Village SDGs, particularly the goals of a poverty-free village, an environmentally conscious village, and a village with equitable economic growth. An analysis of the 2021–2027 Village Medium-Term Development Plan (RPJM Desa) documents reveals an increase in the number of programs related to community economic empowerment and environmental conservation compared to the previous period.

Research findings indicate that community participation in the formulation of post-mining village development agendas in Bangka Regency remains largely formalistic and does not yet fully reflect substantive involvement in the decision-making process. Although village deliberations and village development planning meetings (musrenbangdes) are held regularly, community involvement in voicing aspirations and determining development priorities remains dominated by village officials and certain community leaders. This situation results in women, youth, and the poor not having adequate space for participation in the development planning process (Levin et al., 2022).

Observational findings indicate that the level of attendance by various community groups in planning forums has not been accompanied by active engagement in discussion processes or the setting of development agendas. Furthermore, an analysis of musrenbangdes documents suggests that not all community proposals can be incorporated into development programs due to resource constraints and prioritization mechanisms that are more focused on short-term needs. This situation indicates that the agenda-setting process still requires strengthening through a participatory approach capable of ensuring more inclusive representation of community groups (Smits et al., 2020).

The study found that mining companies' involvement in formulating post-mining village development agendas remains partial and has not been systematically integrated into village development planning mechanisms. The relationship between village governments and companies generally occurs through corporate social responsibility (CSR) programs, but is not supported by a dedicated collaborative forum that specifically connects village governments, communities, and companies in formulating post-mining development agendas.

Observations indicate that coordination between village governments and mining companies is still conducted informally and lacks a sustainable institutional framework. Analysis of cooperation documents and CSR reports shows that most company programs remain focused on social assistance and the construction of public facilities. Conversely, programs oriented toward environmental rehabilitation, economic diversification, and the development of sustainable livelihoods remain relatively limited. These findings indicate the need to strengthen collaborative governance so that corporate resources can be better integrated with the development needs of post-mining villages (Hossain et al., 2025; Sidorenko et al., 2020).

Research results show that poverty and economic transformation are the most dominant issues on the post-mining village development agenda in Bangka Regency. The decline in mining activities has led to a reduction in employment opportunities and sources of community income, making the need for economic empowerment programs, the development of productive enterprises, and the creation of new jobs a primary concern in village development planning.

Field observations indicate that some post-mining areas still face limitations in productive economic activities, resulting in high community dependence on government assistance. These findings are reinforced by an analysis of Bangka Regency's RPJMD (Regional Medium-Term Development Plan) and Village SDGs documents, which prioritize poverty reduction, increased employment opportunities, strengthening of MSMEs, and local economic development as key development priorities. Thus, the post-mining village development agenda has begun to incorporate the principles of the Village SDGs, although the integration of post-mining issues into development policies remains suboptimal. Strengthening participatory, collaborative, and locally-driven agenda-setting mechanisms is a critical factor in supporting economic transformation, environmental rehabilitation, and the achievement of sustainable development goals in post-mining areas.

Public Policy Findings: The Dimension of Post-Mining Village Development Policy Adoption

The research findings indicate that the adoption of post-mining village development policies in Bangka Regency is carried out through the integration of Village SDG goals and indicators into village planning and budgeting documents, such as the Village Medium-Term Development Plan (RPJM Desa), the Village Annual Work Plan (RKP Desa), and the Village Budget (APBDes). This integration reflects the village government's efforts to align local development with the sustainable development policy directions established at the national and regional levels. Interview findings indicate that village governments are directed to formulate development programs capable of addressing issues of poverty, community economic empowerment, and environmental management. Observational results show that Village SDG indicators have been used as one of the bases for the formulation of annual development programs. Analysis of the Village Medium-Term Development Plan (RPJM Desa) and the Village Annual Work Plan (RKP Desa) documents also indicates that Village SDG objectives have been incorporated into various development programs, such as SME development, enhancing food security, poverty reduction, and village environmental management. These findings suggest that the principles of sustainable development are beginning to be internalized in the post-mining village development planning process (Das, 2024; Pavloudakis et al., 2024).

The study also found that policy adoption is significantly influenced by regulatory support from the central and local governments. The existence of regulations provides direction, legitimacy, and certainty for village governments in determining development priorities. Observational results indicate that village officials use various regulations as the primary reference in the process of formulating development policies and programs. Document analysis reveals that the policy adoption process refers to the National Medium-Term Development Plan (RPJMN), the Bangka Regency Medium-Term Development Plan (RPJMD), Village SDGs regulations, the Village Medium-Term Development Plan (RPJM Desa), and various provisions regarding village fund management. However, the policy adoption process is not applied comprehensively to all Village SDGs programs but is carried out selectively based on community needs, regional characteristics, and village financial capacity. Villages tend to prioritize programs that provide direct benefits to the community, particularly those related to poverty alleviation, strengthening productive enterprises, food security, and economic infrastructure development. This situation indicates that the policy adoption process occurs adaptively in accordance with local needs and the village's resource constraints.

Further research findings indicate that the post-mining village development policies adopted remain more focused on economic and social aspects than on environmental rehabilitation. Dominant programs include community economic empowerment, SME development, social assistance, skills training, and labor-intensive activities. Conversely, programs for the utilization of former mining sites and environmental rehabilitation still receive a relatively limited share in village development planning. Additionally, the involvement of mining companies in the policy adoption process remains supportive through *Corporate Social Responsibility* (CSR) programs and has not been optimally integrated into decision-making. The study also found that limitations in village institutional capacity, human resource quality, availability of development data, and technical support constitute barriers in the policy adoption process. Overall, these findings indicate that the adoption of post-mining village development policies in Bangka Regency has integrated the principles of the Village SDGs, but still requires institutional capacity building, multi-stakeholder collaboration, and a more balanced integration of economic, social, and environmental dimensions to support sustainable development in post-mining areas (Chung et al., 2022; Sanders & Fitzpatrick, 2022).

Public Policy Findings on the Implementation Dimension of Post-Mining Village Development Policies

Research findings indicate that the implementation of post-mining village development policies in Bangka Regency has been carried out through various programs oriented toward achieving Village SDGs, such as community economic empowerment, SME development, strengthening food security, village infrastructure development, improving basic services, and poverty reduction. Nevertheless, the implementation of these policies remains sectoral and has not yet been integrated into a comprehensive post-mining development framework. Interview findings indicate that village development has been directed toward achieving the Village SDGs, yet programs related to post-mining areas remain scattered across various activities and are not supported by an integrated development design. Observation results show that various programs have been implemented in the study villages, but the interconnectivity between programs remains relatively weak. Programs for economic empowerment, environmental management, and strengthening village institutions tend to be carried out separately without clear integration mechanisms. An analysis of Village Medium-Term

Development Plans (RPJM Desa), Village Annual Work Plans (RKP Desa), and development implementation reports reveals that most activities have been carried out as planned; however, no implementation model specifically designed for post-mining village development has been identified (Dzulqarnain et al., 2022; Kemp & Owen, 2019).

The research also found that policy implementation is more oriented toward community economic recovery in response to declining mining activity. Various development programs focus on creating alternative livelihoods, enhancing community business capacity, and strengthening the local economy. Field findings indicate the emergence of various productive economic activities, such as freshwater fish farming in former mining pits, horticultural enterprises, livestock farming, and household-based microenterprises. Analysis of the Village Budget (APBDes) shows that the largest proportion of the budget is allocated to economic empowerment programs and social welfare improvement. However, the implementation of policies related to environmental rehabilitation remains suboptimal. The utilization of post-mining land and the development of reclaimed areas have not been maximized despite their significant potential to support sustainable development (Franks et al., 2020). Observations indicate that some former mining sites have been utilized as aquaculture areas and village tourism destinations, but their scope remains limited compared to the total available post-mining area. An analysis of village development documents also indicates that environmental rehabilitation programs receive lower allocations compared to economic and infrastructure programs.

Further research findings indicate that policy implementation involves various stakeholders, including local governments, village governments, Village Councils (BPD), village facilitators, community groups, and mining companies. Although collaboration among these actors has been established, the ongoing coordination remains fragmented and is not yet supported by strong institutional mechanisms. Limitations in financial resources, human resource capacity, and village institutions also pose major challenges in the implementation of development programs. Some villages still face limitations in technical personnel, access to alternative funding, and the capacity of local officials to manage Village SDGs-based development programs. Nevertheless, policy implementation has made positive contributions to the achievement of several Village SDGs indicators, particularly in the areas of poverty reduction, increased community income, strengthened food security, and local economic development. Observations indicate an increase in productive economic activities among the community and the growth of micro-enterprises based on local potential, while an analysis of Village SDGs documents reveals improved performance on indicators such as villages free from poverty, villages free from hunger, environmentally conscious villages, and villages with equitable economic growth. These findings indicate that the implementation of post-mining village development policies has had a positive impact on community well-being; however, it still requires strengthened program integration, enhanced institutional capacity, optimized multi-stakeholder collaboration, and a balance between economic, social, and environmental objectives to support the sustainable achievement of Village SDGs

Post-Mining Village Development Policies in Achieving the Sustainable Development Goals (SDGs) in Bangka Regency

Research results indicate that post-mining village development policies in Bangka Regency have undergone a process of agenda setting, formulation, adoption, and implementation aimed at supporting the achievement of the Village Sustainable Development Goals (SDGs). The policy agenda emerged as a response to various post-mining issues, such as poverty, limited alternative employment opportunities, environmental degradation, low productivity of former mining lands, and the suboptimal utilization of local economic potential. These issues subsequently garnered attention from local governments, village governments, communities, and the private sector, thereby becoming part of village development priorities. The agenda-setting process took place through Village Consultative Meetings (Musdes), Village Development Planning Consultative Meetings (Musrenbangdes), and synchronization with regional and national planning documents that integrate the principles of Village SDGs.

Research findings indicate that the post-mining village development agenda is shaped through the interaction of various actors with differing interests and resources, including local governments, village governments, Village Councils (BPD), village facilitators, mining companies, community business groups, community leaders, and youth leaders. This multi-stakeholder involvement indicates the presence of network-based governance practices in the policy formulation process. However, relationships among actors remain dominated by consultative patterns, while the village government remains the primary actor in determining development priorities. Consequently, the resulting development agenda remains more focused on community economic development than on environmental rehabilitation and ecological transformation of the post-mining area.

During the formulation stage, various policy alternatives were developed to address the social, economic, and environmental challenges faced by post-mining communities. The resulting policies include the development of small and medium enterprises (SMEs), aquaculture in former mining pits, village tourism development, integrated agriculture, empowerment of community-based enterprises, human resource development, strengthening of village institutions, and poverty reduction. Policy formulation was carried out through a participatory mechanism involving various stakeholders, thereby accommodating the needs of local communities. However, the absence of specific policies that comprehensively regulate post-mining village development has resulted in the various policy alternatives formulated remaining sectoral in nature and not yet integrated into a cohesive, long-term development framework (Chater & Loewenstein, 2023; Levin et al., 2022).

The policy adoption phase indicates that village governments select programs deemed most relevant to community needs and available fiscal capacity. Widely adopted programs include business capital assistance, skills training, SME development, aquaculture, village infrastructure development, and tourism development based on local potential. Policy adoption decisions are influenced by community needs, the direction of central and local government policies, budget availability, and support from mining companies' CSR programs. Although the decision-making process has taken place through relatively participatory mechanisms, the adopted policies still place greater emphasis on meeting the community's economic needs and social welfare compared to environmental rehabilitation, which requires larger investments and stronger institutional support.

The implementation of post-mining village development policies has been realized through various programs supporting the achievement of Village SDGs, particularly in the areas of poverty reduction, community economic empowerment, improved social welfare, strengthened food security, and local economic development. Program implementation is supported by the Village Fund, the Regional Budget (APBD), and the Corporate Social Responsibility (CSR) programs of mining companies. Research findings indicate the emergence of various alternative economic activities, such as aquaculture, horticulture, livestock farming, and household-based microenterprises that contribute to increased community income. These programs demonstrate efforts to transform the community's economy from dependence on the mining sector toward more sustainable livelihoods (Kemp & Owen, 2019; Simanjuntak et al., 2024).

Nevertheless, policy implementation still faces a number of challenges. Environmental rehabilitation programs have not received the same level of attention as economic and social programs, resulting in relatively limited post-mining land utilization. Additionally, coordination among development actors has not been optimal due to the absence of strongly institutionalized collaborative mechanisms. Limitations in financial resources, village administrative capacity, technical support, and the quality of development data also hinder the effectiveness of policy implementation. These conditions result in various development programs operating in a fragmented manner and failing to achieve an integrated transformation of post-mining areas across economic, social, and environmental dimensions.

Overall, the research findings indicate that post-mining village development policies in Bangka Regency have contributed to the achievement of the Village SDGs, particularly in poverty reduction, local economic development, community empowerment, and improved social welfare. However, the processes of agenda setting, formulation, adoption, and implementation of policies still face challenges, including the absence of specific post-mining village development policies, a dominant economic orientation over environmental dimensions, limited institutional capacity, and suboptimal collaboration among stakeholders. These findings indicate the need for a more integrative, collaborative, and sustainable governance model for post-mining village development through strengthened synergy between the government, the community, mining companies, and other stakeholders so that economic, social, and environmental development goals can be achieved in a balanced manner in accordance with the principles of the Sustainable Development Goals (SDGs).

CONCLUSION

Based on the research findings, post-mining village development governance to realize the Sustainable Development Goals (SDGs) in Bangka Regency has not been functioning optimally. Although the stages of agenda setting, policy formulation, adoption, and implementation have been carried out, there is still no specific policy comprehensively regulating post-mining village development. This situation results in development proceeding in a sectoral manner and failing to integrate economic, social, and environmental dimensions in a sustainable way. From a network governance perspective, the elements of actor interdependence, resource exchange, rules of the game, and network autonomy have been established; however, their effectiveness remains constrained by weak cross-sectoral

coordination, limited institutional capacity at the village level, dependence on support from mining companies, and the suboptimal state of environmental rehabilitation and the development of alternative community economies.

This study also indicates that the success of post-mining village development is supported by the commitment of local and village governments, the implementation of the Village SDGs, community participation, the presence of village facilitators, corporate social responsibility (CSR) programs, and social capital in the form of a culture of deliberation and mutual cooperation. These factors serve as institutional and social capital that strengthens collaboration among actors in the development process. However, the effectiveness of governance still faces obstacles in the form of the absence of specific regulations, limited village financial and human resources, weak inter-institutional coordination, and the suboptimal integration of environmental aspects into development policies.

The research findings reveal an existing model indicating that post-mining village development governance remains fragmented and unintegrated. Based on these conditions, this study developed the Collaborative Sustainable Post-Mining Village Governance (CSPMVG) model, which integrates the public policy cycle with network governance through strengthened collaboration among actors, resource sharing, adaptive institutional rules, and participatory network autonomy. This model positions special regulations, strengthening of village institutional capacity, environmental rehabilitation, community economic empowerment, and the active involvement of all stakeholders as the main foundations for sustainable post-mining village development oriented toward achieving the Village SDGs

REFERENCES

- Ardiawanti, A., Zulkifli, Z., & Hasni, H. (2025). Analisis Implementasi Kebijakan Program Sustainable Development Goals terhadap Pemberdayaan Ekonomi dalam Upaya Meningkatkan Kesejahteraan Masyarakat : Studi pada Desa Pakkasalo Kec. Sibulue Kab. Bone. *J-CEKI: Jurnal Cendekia Ilmiah*, 4(4), 2760–2778. <https://doi.org/10.56799/JCEKI.V4I4.10517>
- Chater, N., & Loewenstein, G. (2023). The I-Frame and The S-Frame: How Focusing on Individual-Level Solutions Has Led Behavioral Public Policy Astray. *Behavioral and Brain Sciences*, 46, e147. <https://doi.org/10.1017/S0140525X22002023>
- Chung, J., Asad, M. W. A., & Topal, E. (2022). Timing of Transition from Open-Pit to Underground Mining: A Simultaneous Optimisation Model for Open-Pit and Underground Mine Production Schedules. *Resources Policy*, 77, 102632. <https://doi.org/10.1016/j.resourpol.2022.102632>
- Das, D. K. (2024). Exploring the Symbiotic Relationship between Digital Transformation, Infrastructure, Service Delivery, and Governance for Smart Sustainable Cities. *Smart Cities*, 7(2), 806–835. <https://doi.org/10.3390/smartcities7020034>
- Dwiyantri, N. K. N., Widhiasthini, N. W., Dewi, N. L. Y., & Maheswari, A. A. I. A. (2025). Implementasi Sustainable Development Goals pada Program Bank Sampah dalam Pemilahan Sampah Anorganik di Desa Sidakarya. *Governance: Jurnal Ilmiah Kajian Politik Lokal Dan Pembangunan*, 12(2), 275–286. <https://doi.org/10.56015/GJIKPLP.V12I2.590>
- Dzulqarnain, G. Z., Meigawati, D., & Basori, Y. F. (2022). Implementasi Program Sustainable Development Goals (SDGs) dalam Upaya Penanggulangan Kemiskinan di Kota Sukabumi. *Professional: Jurnal Komunikasi Dan Administrasi Publik*, 9(1), 109–116–109–116. <https://doi.org/10.37676/PROFESSIONAL.V9I1.2505>
- Franks, D. M., Ngonze, C., Pakoun, L., & Hailu, D. (2020). Voices of Artisanal and Small-Scale Mining, Visions of The Future: Report from The International Conference on Artisanal and Small-Scale Mining and Quarrying. *The Extractive Industries and Society*, 7(2), 505–511. <https://doi.org/10.1016/j.exis.2020.01.011>
- Hendren, K., Newcomer, K., Pandey, S. K., Smith, M., & Sumner, N. (2023). How Qualitative Research Methods Can Be Leveraged to Strengthen Mixed Methods Research in Public Policy and Public Administration? *Public Administration Review*, 83(3), 468–485. <https://doi.org/10.1111/puar.13528>
- Hossain, I., Haque, A. K. M. M., Ullah, S. M. A., & Salehin, A. (2025). Assessing the Role of Urban Governance in Promoting Sustainable Cities and Communities: Evidence from Four City Corporations in Bangladesh. *International Journal of Community Well-Being*, 8(2), 303–330. <https://doi.org/10.1007/s42413-025-00247-2>
- Kemp, D., & Owen, J. R. (2019). Characterising The Interface Between Large and Small-Scale Mining. *The Extractive Industries and Society*, 6(4), 1091–1100. <https://doi.org/10.1016/j.exis.2019.07.002>
- Levin, A. T., Owusu-Boaitey, N., Pugh, S., Fosdick, B. K., Zwi, A. B., Malani, A., Soman, S., Besançon, L., Kashnitsky, I., Ganesh, S., McLaughlin, A., Song, G., Uhm, R., Herrera-Espósito, D., de los Campos, G., Antonio, A. C. P.,

- Tadese, E. B., & Meyerowitz-Katz, G. (2022). Assessing The Burden of COVID-19 in Developing Countries: Systematic Review, Meta-Analysis and Public Policy Implications. *BMJ Global Health*, 7(5), e008477. <https://doi.org/10.1136/bmjgh-2022-008477>
- Pavloudakis, F., Roumpos, C., & Spanidis, P.-M. (2024). Planning the Closure of Surface Coal Mines Based on Circular Economy Principles. *Circular Economy and Sustainability*, 4(1), 75–96. <https://doi.org/10.1007/s43615-023-00278-x>
- Sanders, J., & Fitzpatrick, A. (2022). A Peruvian Case Study: Optimising Mine Planning Through Mine Closure Decision Assessment. *Proceedings of the 15th International Conference on Mine Closure, Australian Centre for Geomechanics*, 713–724. https://doi.org/10.36487/ACG_repo/2215_51
- Shu, Y., Deng, N., Wu, Y., Bao, S., & Bie, A. (2023). Urban Governance and Sustainable Development: The Effect of Smart City on Carbon Emission in China. *Technological Forecasting and Social Change*, 193, 122643. <https://doi.org/10.1016/j.techfore.2023.122643>
- Sidorenko, O., Sairinen, R., & Moore, K. (2020). Rethinking The Concept of Small-Scale Mining for Technologically Advanced Raw Materials Production. *Resources Policy*, 68, 101712. <https://doi.org/10.1016/j.resourpol.2020.101712>
- Simanjuntak, L., Satya, L. S., Braggi, M. C., & Kitorang, K. (2024). Analisis Kolaborasi Penta-Helix dalam Implementasi Sustainable Development Goals pada Program Desa Berdaya - Taman Inspirasi Waibu. *Jurnal Ekonomika: Manajemen, Akuntansi, Dan Perbankan Syari'ah*, 13(1), 100–111. <https://doi.org/10.24903/je.v13i1.2685>
- Smits, K. M., McDonald, L., Smith, N. M., Gonzalez, F., Lucena, J., Martinez, G., Restrepo, O. J., & Rosas, S. (2020). Voces Mineras: Clarifying The Future of Artisanal and Small-Scale Mining Collaborations. *The Extractive Industries and Society*, 7(1), 68–72. <https://doi.org/10.1016/j.exis.2019.12.003>
- Sutrisno, A. D., Suryawan, I. W. K., & Lee, C.-H. (2026). Exploring The Community's Adaptive Preferences in Sustainable Post-Mining Development. *Resources Policy*, 117, 105891. <https://doi.org/10.1016/j.resourpol.2026.105891>
- Usman, U., Wartoyo, W., Haida, N., & Wahyuningsih, N. (2024). Implementasi Sustainable Development Goals (SDGS) di Indonesia Perspektif Ekonomi Islam. *Al-Masharif: Jurnal Ilmu Ekonomi Dan Keislaman*, 12(1), 108–126. <https://doi.org/10.24952/masharif.v12i1.12446>
- Yudanto, A. A., Solikin, A., & Windani, I. (2024). Collaborative Governance to achieve Village SDGs: A Case Study of Irrigation Systems in Krandegan Village. *INOBIIS: Jurnal Inovasi Bisnis Dan Manajemen Indonesia*, 7(4), 535–550. <https://doi.org/10.31842/jurnalinobis.v7i4.345>