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Implementation of the Development and Planned Expansion of the Galang Batang Special Economic Zone

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ABSTRACT

The Galang Batang Special Economic Zone (SEZ) is an industrial and investment policy instrument requiring coordination across levels of government, particularly when development of the existing zone coincides with plans for expansion. This study examines the implementation status of Galang Batang SEZ development and planned expansion in Bintan Regency and analyzes supporting factors and areas for improvement using the six variables of Van Meter and Van Horn's model. It adopts a descriptive qualitative approach through a document-based case study. Data are drawn from SEZ designation and administration regulations, the Batam–Bintan–Karimun master plan, government reports, administrative information, and relevant journal articles published during 2022–2026. The analysis distinguishes legal designation, planning documents, application processes, realized investment, and economic potential. The findings show that development of the existing zone has a legal basis and reported investment activity, while expansion requires further verification of sectoral approvals, land readiness, coordination, and administrative follow-up. The six implementation variables are interrelated through objective clarity, resource adequacy, communication, organizational mandates, external conditions, and implementer responses. Potential investment and employment figures cannot be treated as realized outcomes. The study concludes that an area-status register, authority matrix, follow-up documentation, and integrated socioenvironmental monitoring are needed. Because field data have not yet been collected, the conclusions do not comprehensively assess whether the expansion has succeeded or failed.

Keyword: Policy, Implementation, Development, Special Economic Zone

INTRODUCTION

Special economic zones are place-based policy instruments that bring together industrialization, investment mobilization, spatial planning, and public administration. Rather than merely offering incentives, governments establish a set of authorities and facilities that must operate as an integrated whole. The success of these instruments therefore cannot be determined by the number of

announced projects. Clarity of program ownership, site suitability, service speed, supplier capacity, and the distribution of benefits are interconnected concerns. Reviews of economic zones in Indonesia emphasize the importance of distinguishing aggregate growth outcomes from the capacity of policies to generate measurable improvements in local welfare (Sa'diah & Khoirunurrofik, 2025).

The Galang Batang Special Economic Zone (SEZ) in Bintan Regency provides an important example of how industrial development plans in an archipelagic region intersect with national and subnational authority. Its legal designation is established by Government Regulation Number 42 of 2017, which designates 2,333.6 hectares in Gunung Kijang District. The zone is intended for bauxite-based processing industries, logistics activities, and supporting infrastructure. Such designation constitutes an initial normative condition; the designated area does not mean that every part of the zone has been developed, equipped with all necessary facilities, or used by companies. Distinguishing these statuses is a fundamental principle in assessing implementation.

The need to assess implementation arises because the direction of zone development intersects with mineral downstreaming policy and the integration of the Batam–Bintan–Karimun region. Presidential Regulation Number 1 of 2024 sets out the regional master plan and identifies the need to develop industrial activities and connectivity. In the source paper, this agenda refers to Toapaya, Kampung Masiran, and Poto Island as prospective development planning areas. The inclusion of these locations in the master plan cannot be interpreted as an automatic change to the SEZ's legal boundaries, the release of all land, or the issuance of every sectoral permit. The distinction between spatial plans and implementation decisions must be preserved to prevent policy descriptions from exceeding the available administrative evidence.

Studies of Galang Batang have shown that zone governance issues concern the quality of coordination among actors, the existence of collaborative mechanisms, and the capacity of implementing organizations. These findings strengthen the case for using implementation mechanisms as the unit of analysis rather than stopping at narratives about natural-resource potential. An industrial zone may enjoy a strategic geographical location, but locational advantages become development outputs only through permitting processes, infrastructure provision, supervision, and stable working relationships between business entities and public institutions. In other words, the quality of administrative processes forms part of the zone's competitiveness (Kurnianingsih & Lamidi, 2025).

The development of Galang Batang is also inseparable from interagency relationships governing trade, customs, investment, and administrative services. Literature specifically addressing the zone identifies the need to strengthen supervision, integrate technology, and foster institutional synergies so that zone facilities can effectively support economic activity. This perspective regards implementation performance as the outcome of organizational interaction rather than the isolated actions of central government, local government, or the developer. Accordingly, this article links formal mandates with document exchanges, fulfillment of obligations, and the traceability of follow-up actions documented in secondary information (Al Anshori et al., 2025).

A key point in the recent chronology is the submission of the expansion proposal in August 2025, the return of the application for revision in October 2025, and its resubmission in December 2025, as recorded in the source paper based on the performance report of the Secretariat-General of the National SEZ Council.

This sequence illustrates an administrative stage involving assessment and refinement, rather than a decision completed in a single round. Process analysis must identify the requirements reviewed, the decision-making institutions, and the consequences of delays for other activities. Without such details, resubmission remains merely a chronological event that does not sufficiently explain the effectiveness or weaknesses of implementation.

Continued attention to accelerating expansion was evident in a central government statement issued on October 21, 2026. Galang Batang was reported to have potential investment of IDR 114.08 trillion and potential employment of 94,000 workers. Both figures are highly relevant in illustrating the scale of the policy interests involved, but they are prospective. Potential is not equivalent to contractual commitments, realized financing, construction activity, or workers already employed. Conflating these categories risks generating an overly optimistic assessment of implementation or shifting the burden of proof from implementation documents to investment-promotion statements.

The study's central problem arises from the tension between accelerating economic activity and ensuring governance certainty. Companies require predictable decisions and efficient services, while the government must ensure spatial conformity, environmental protection, labor compliance, and social acceptance. Analyses of investment in Indonesian SEZs indicate that institutional factors and the quality of local government are associated with a zone's ability to attract business activities. Therefore, faster permitting must be understood as removing unnecessary procedural barriers without eliminating substantive assessments required by law (Nugroho et al., 2024).

International experience demonstrates that establishing an economic zone does not automatically guarantee growth. Evaluations of earlier integrated development zone policies in Indonesia indicate that stand-alone fiscal incentives do not always produce the desired economic transformation. This lesson is important in resisting the tendency to regard administrative designation as final success. In Galang Batang, policy performance should be measured through intermediate outcomes: document availability, legally valid permitting decisions, infrastructure progress, consistency of investment reports, and protection of community interests throughout implementation (Rothenberg et al., 2025).

More broadly, special economic zones can contribute to changes in the structure of production. Cross-country research finds that zone policies may affect the composition of industrial sectors, although their effects differ across country groups and economic characteristics. This finding underscores that Galang Batang's downstreaming agenda cannot be evaluated solely by the value of factory construction. Further questions concern the capacity of processing activities to develop backward and forward linkages, enhance domestic supplier capabilities, strengthen workforce skills, and create added value in Bintan Regency (Otchia & Wiryawan, 2025).

In terms of social distribution, high investment values do not automatically guarantee that benefits are distributed evenly. Studies of economic zones in Indonesia have found varying relationships between the presence of zones and income inequality within regions. This heterogeneity requires researchers to examine local contexts, workforce profiles, residents' skills, and small businesses' access to industrial activities. In Galang Batang, claims about community benefits should be differentiated by indicators of employment, income, business opportunities, infrastructure, and environmental impacts, rather than summarized in a single statement about investment growth (Hornok & Raeskyesa, 2024).

The mineral downstreaming agenda also presents challenges that investment instruments alone cannot fully address. Studies of Indonesia's critical mineral industrialization identify the possibility of large industrial activities with limited local linkages and unevenly distributed social and environmental burdens. Although their objects of study differ from bauxite processing in Galang Batang, warnings about enclave risks provide a relevant comparative lens. This article does not assume that such risks have been demonstrated throughout Galang Batang; instead, it uses them to identify indicators requiring verification in subsequent evaluations (Warburton, 2024).

The archipelagic context makes coordination problems more complex. Every spatial development plan may intersect with ports, maritime transportation networks, utilities, forest areas, coastal utilization, and investment regulations. Such relationships require policy design to be integrated from the national level to local implementation. Studies of Indonesia's SEZ regulatory design demonstrate that sustainable zone development depends on the extent to which objectives, incentive mechanisms, authorities, and spatial planning are integrated into a consistent framework. Fragmentation among these four elements can burden implementation even where investment attractiveness appears strong (Kuntjara et al., 2026).

Public administration research often treats implementation as a stage following policy adoption. For multisectoral projects, this temporal division is overly simplistic because policy development continues through regulatory interpretation, changes in requirements, negotiation among actors, and resolution of constraints. Institutional analyses of Indonesian SEZs reveal the importance of examining the alignment between formal organizations and actual coordination practices. Accordingly, this article views implementation as a dynamic process requiring precise allocation of authority and evidence at each decision point, rather than a linear sequence of activities that proceeds without adjustments (Kumalasari et al., 2026).

From an inter-actor perspective, the experience of the Mandalika SEZ shows that central–local relationships and bargaining capacity can shape zone development agendas. Although Galang Batang is an industrial zone rather than primarily a tourism zone, issues of governmental scale present analytical similarities. Top-down decision-making, capacity disparities, and weak communication can render coordination forums less effective. This comparison supports an implementation analysis that examines not only formal decisions but also mechanisms for transmitting decisions, acceptance by implementers, and responses to sociopolitical conditions (Affandi et al., 2024).

Against this background, the study aims to examine implementation of Galang Batang SEZ development policy and planned expansion using information available through early November 2026. The first research question considers how the regulatory basis, administrative stages, and status of development indicators can be consistently distinguished. The second investigates how the six Van Meter and Van Horn variables policy standards and objectives, resources, communication, characteristics of implementing organizations, external conditions, and dispositions help explain coordination needs. The third identifies directions for improving policy oversight without assuming the results of field examinations that have not been conducted.

The novelty of this discussion lies in applying a policy-status tracking logic to connect the six implementation variables with evidentiary requirements at each stage. Rather than presenting effectiveness figures based on the author's

opinions, the analysis constructs an information matrix that differentiates provisions, processes, outputs, and potential outcomes. Recent studies of Indonesian SEZ policy emphasize legal certainty, infrastructure availability, land requirements, and social relations as priorities for policy strengthening. This article examines these issues in greater depth within a single case, focusing on the chronology of applications, actor mapping, and the accuracy of indicators.

RESEARCH METHODS

This study employs a descriptive qualitative approach using a document-based case study method. Its subject is implementation of existing-zone development and the proposed expansion of the Galang Batang SEZ, rather than the overall performance of Indonesia's mineral industry. The approach reflects the available materials, including legal instruments, accountability reports, master plans, institutional publications, and news reports identifying their information sources. The case study is used to trace relationships between decisions and procedural stages and to assess varying degrees of evidentiary certainty. It is not intended to statistically measure the policy's effect on economic growth in Bintan Regency.

The units of analysis comprise policy, implementing organizations, coordination relationships, and output indicators identifiable in secondary materials. The analysis follows two distinct tracks. The first concerns the development of the designated zone, including facility provision and reported realized investment. The second concerns the proposed expansion process, which requires submission, evaluation, approval, and follow-up on requirements. Both tracks belong to the same development policy but have different success indicators and decision points. Distinguishing them prevents the performance of the existing zone from being conflated with the status of locations that remain at the planning stage.

The principal legal materials include Government Regulation Number 42 of 2017 designating the Galang Batang SEZ, Government Regulation Number 40 of 2021 on SEZ administration, and Presidential Regulation Number 1 of 2024 concerning the Batam, Bintan, and Karimun regional development master plan. Supplementary data derive from official information issued by the Secretariat-General of the National SEZ Council, local governments, and the Coordinating Ministry for Economic Affairs as documented in the source paper. Media sources are used only to identify attributed events and statements; media publications are not treated as substitutes for official decisions or administrative databases.

The analytical procedure comprises four interrelated stages. First, each item of information is classified by document type, date, institution, and policy concept. Second, information with differing scopes is separated, particularly plans, realizations, targets, and potential. Third, document contents are linked to the six implementation variables and categorized as direct evidence, an indication, or a matter requiring verification. Fourth, conclusions are developed through cross-source examination without assigning numerical scores to variables lacking measurement instruments. This technique aims to enhance the traceability of arguments and limit interpretations that exceed the available information.

The theoretical framework employs Donald S. Van Meter and Carl E. Van Horn's model to organize analytical categories. Policy standards and objectives are assessed through the clarity of mandates and indicators, while resources encompass personnel, financing, information, and document readiness. Communication concerns interorganizational relationships and the exchange of

decisions; characteristics of implementers involve mandates and working procedures. Social, economic, and political conditions describe environmental influences; disposition refers to acceptance of responsibilities and follow-up actions. Because the model originated in classical scholarship, the primary 1975 reference is retained specifically as the theoretical foundation, while supporting empirical literature is limited to the past five years.

To maintain interpretive validity, the study applies triangulation across document types and time periods. When sources mention the zone's area, the information is traced to either the designation regulation or a development map. For investments, the conceptual review distinguishes annual values, quarterly values, cumulative totals, commitments, and projections. For permits, statuses are differentiated among proposals, revisions, recommendations, approvals, and implementation. Research on coastal zone management using system dynamics provides a methodological rationale that one administrative change can affect a sequence of other activities, making it necessary to consider interconnections among stages (Moeis et al., 2024).

This study did not conduct interviews with officials, construction observations, site inspections, investment audits, or environmental quality measurements. Consequently, statements about implementers' motivations, actual service speed, the status of particular land parcels, compliance by all companies, or causal impacts on communities are not presented as findings. These limitations do not justify abandoning analysis; rather, they establish the basis for verification recommendations. Research on sustainable development-based zone management emphasizes that social, economic, and environmental indicators need to be distinguished before being integrated into a more comprehensive evaluation (Priandani et al., 2024).

Scientific literature is used for conceptual comparison rather than as a substitute for case evidence. Journal articles published during 2022–2026 were reviewed through publishers' websites with attention to their relevance to SEZs, investment administration, multilevel governmental coordination, mineral industrialization, and socioenvironmental impacts. Some studies employ quantitative methods and examine cases outside Indonesia; their findings are not directly generalized to Bintan. The comparisons serve to identify mechanisms that may require testing, such as institutional capacity, spillover effects, service quality, and industrial linkages. The distinction between case evidence and comparative findings guides the presentation of the results and discussion.

To make the argument transparent, tables summarize documents and indicator statuses, while figures depict relationships among decisions and follow-up pathways. The visualizations are not based on statistical calculations from a sample and do not display effectiveness scores that have not been observed. Each figure is accompanied by an analytical explanation of the relationships among its elements and the evidentiary limits for subsequent interpretation. Although technology use in zone service development is addressed in studies on the SEZ 5.0 regulatory framework, digital instruments must remain tools supporting accountability for authority rather than justifications for overlooking substantive legal requirements.

RESULTS AND DISCUSSION

1. Policy Status and Differences Between Implementation Tracks

The document review reveals that Galang Batang has a legal foundation whose instruments must be distinguished by function. The designation regulation

establishes the zone, the administration regulation governs development and expansion procedures, and the master plan provides a long-term spatial and connectivity orientation. These three layers of documents may support one another but are not interchangeable. A plan's alignment with national policy does not automatically establish whether a sectoral permit has been completed. Accordingly, the initial performance analysis must ascertain whether the object under examination is the designation decision, a spatial development plan, a proposal document, fulfilled requirements, or reported development outcomes.

The designation of the SEZ under Government Regulation Number 42 of 2017 is a verifiable legal fact. By contrast, location development plans contained in the annex to Presidential Regulation Number 1 of 2024 must be interpreted at the appropriate planning level. The source paper reports approximately 2,653 hectares as an indication of long-term expansion plans, not a final legally approved area. Comparing this figure with the existing 2,333.6-hectare zone without distinguishing their legal foundations would constitute a conceptual error. Certainty regarding the most recently proposed area, land already controlled, and the authorized boundaries can only be established through more detailed permitting documents and authoritative maps.

Table 1. Legal Basis and Evidentiary Status of Galang Batang SEZ Development

Document/period	Contents and events	Analytical status
GR 42/2017	Designation of the Galang Batang SEZ, 2,333.6 ha	Existing zone; basis for designation
GR 40/2021	Rules on establishment, expansion, services, and institutions	Procedural framework; not evidence of completed permits
Presidential Regulation 1/2024	BBK master plan and industrial development	Spatial and strategic direction; further decisions required
August–December 2025	Submission, evaluation/revision, and resubmission	Administrative history of the expansion proposal
October 2026	Direction to accelerate industrial permitting	Policy agenda requiring further examination

Source: Author's synthesis of policy documents and analysis, 2026.

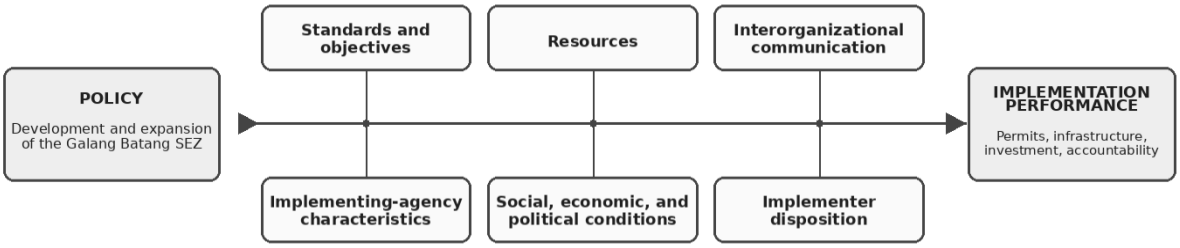
Table 1 distinguishes three layers of authority: designation, administrative procedures, and planning directives. This distinction demonstrates that measuring success must begin with an accurate definition of outputs. The designation instrument proves the zone's legal existence but does not establish the extent of facility construction. Procedural regulations establish available mechanisms but do not demonstrate that the requirements for a particular application have been approved. Planning documents outline development directions, yet their implementation depends on subsequent decisions. Distinguishing these domains makes it easier to match evidence with the authority of the responsible officials.

The 2025 application stages and the 2026 acceleration directives show that time also shapes the meaning of each document. An application returned for revision represents an administrative process whose causes and follow-up actions need explanation, not automatic evidence of policy failure. Conversely, resubmission alone does not demonstrate success without the decision status, processing time, and results of compliance with the requirements. This table can

form the basis of a regularly updated status register containing additional columns for document numbers, effective dates, locations, responsible authorities, and evidence of completion.

Distinguishing these stages also addresses the need for adaptive investment governance. Research on strengthening SEZ regulations emphasizes the importance of regulatory harmonization and service certainty in supporting the business climate. For Galang Batang, harmonization entails not merely standardizing document names but clarifying how decisions concerning spatial planning, the environment, ports, and infrastructure depend on one another. The application-tracking mechanism should identify who holds authority at each stage and which requirements cannot be waived despite acceleration instructions (Setiadi & Herman, 2025).

Figure 1. Analytical Framework of the Six Implementation Variables in the Galang Batang SEZ



Source: Developed by the author based on Van Meter and Van Horn's model (1975).

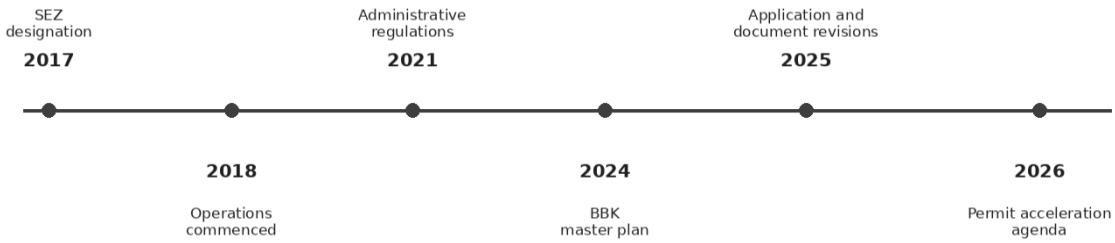
Figure 1 positions policy as an input operating through six implementation variables. Standards and objectives determine the desired performance measures; resources provide operational capacity; communication connects interorganizational decisions; implementing-agency characteristics reflect mandates and operational capacities; the external environment generates support and pressures; and disposition shapes organizational responses. Relationships among these variables are conceptually reciprocal, although the figure presents them as a simplified flow for readability. Policy performance appears as the output, encompassing service certainty, development progress, and socioeconomic accountability.

The framework is not intended to demonstrate the strength of each variable's influence because the study does not use survey data, complete processing-time records, or statistical models. Its purpose is to guide document analysis so that explanations do not focus solely on one institution. For instance, permitting constraints may relate to inconsistent standards, the quality of developer documents, limited reviewing capacity, or ineffective communication channels. Responses should therefore be based on problem diagnosis rather than the assumption that all obstacles arise from the attitudes of particular actors.

In the existing-zone track, relatively traceable outputs include verifiable facilities and investments recorded in official reports. The source paper cites reported realized investment of approximately IDR 15.566 trillion for fiscal year 2025 and approximately IDR 4.08 trillion for the first quarter of 2026. The figures concern different periods and cannot be directly compared without definitions of cumulative values, business coverage, and reporting methods. Assessing effectiveness still requires a consistent data series and an explanation of which investment amounts have been translated into operational activities.

In the planned-expansion track, the relevant indicators instead concern document completion: the validity of site plans, spatial conformity, environmental approval status, land control, relevant sectoral permits, and designation decisions under applicable legal mechanisms. Consequently, the two tracks may display different dynamics during the same period. Economic activity in the existing zone may continue while expansion still requires administrative compliance. Combining both in a single label such as "successful" or "delayed" would obscure which locations and authorities actually require action.

Figure 2. Regulatory Timeline and Administrative Status of Galang Batang



Source: Author's analytical reconstruction, 2026.

Figure 2 organizes key policy events from the zone's designation in 2017, the commencement of operations in 2018, the strengthening of administrative rules in 2021, and the 2024 master plan to the dynamics of the 2025 expansion application and the acceleration agenda in October 2026. This sequence demonstrates that zone establishment and the expansion application are not components of a single procedure undertaken simultaneously. The time intervals also show that evaluation requires a cross-period assessment using different indicators. Chronological information helps prevent the impression that the latest statements supersede previously established legal statuses.

Placing events on a timeline does not imply that all outcomes at each stage have been completed. Symbols in the figure represent reported events or documents, not percentages of project progress. To turn the chronology into a monitoring instrument, each point should be accompanied by decision numbers, map annexes, compliance status, responsible parties, and follow-up dates.

2. Institutions and Inter-Actor Coordination Flows

Zone administration requires coordination mechanisms linking numerous units with different types of authority. The National Council and its secretariat play roles in policy and facilitation; the zone administrator manages services and supervision within its mandate; business entities prepare development works and documentation; local governments handle region-specific affairs; and technical ministries review sectoral requirements. Each party operates under different procedures and indicators. From an implementation perspective, this division underscores the need for agreement on document flows, response deadlines, and the resolution of obstacles involving more than one authority.

Inter-actor relationships cannot be fully assessed by examining organizational charts alone. Formal mandates must be supplemented with information about who makes decisions, coordinates technical comments, grants final approval, and communicates decisions to applicants. When a requirement calls for input from several units, communication flows may be more consequential

than the number of organizations in the structure. Research on the effects of regulatory governance on investment in Indonesia highlights the importance of regulatory certainty within a decentralized government system (Yuwono et al., 2025).

Table 2. Stakeholders, Functions, and Coordination Interfaces

Stakeholders	Implementation functions	Coordination issues to examine
National SEZ Council/Secretariat-General	Facilitation and evaluation of SEZ policy	Synchronization of cross-sectoral recommendations
SEZ Administrator	Services, guidance, and supervision within its mandate	Clarity of service status and oversight
Developer/management business entity	Zone development, application submissions, and compliance	Quality of land, technical, and financing data
Bintan Regency Government	Planning support and regency-level responsibilities	Spatial consistency and local benefits
Riau Islands Provincial Government	Provincial responsibilities and coordination	Integration of regional sectoral supervision
Technical ministries/agencies	Approvals and supervision under sectoral authority	Sequence of spatial, environmental, and port requirements
Communities and local businesses	Affected groups, consultation participants, and business partners	Information access and grievance handling

Source: Author's synthesis of policy documents and analysis, 2026.

Table 2 shows that implementation combines two orientations: investment facilitation and compliance oversight. Business entities require predictable services, but administrators and technical agencies are also responsible for maintaining the legality of implementation. The columns clarify the information needed to assess coordination. If a technical document cannot yet be processed, the initial review should concern application completeness and the decision-making unit rather than immediately concluding that investment has been rejected. Such a matrix makes mandates more operational and auditable.

In terms of vertical relationships, the table also prevents accountability from being concentrated in one institution when the requisite powers are distributed across several government levels. Improving coordination requires a linking mechanism that records senders, recipients, document types, decision dates, and follow-up outcomes. Alongside public institutions, communities need access to information and grievance channels that do not obstruct lawful service processes. Participation does not mean having the authority to approve every decision; rather, it helps maintain openness and identify risks that may not appear in investment reports.

The experience of the Mandalika SEZ illustrates the administrator's role in linking regulations with business facilities. Overlapping services and difficulties in meeting requirements can be reduced when the organizational structure provides

a clear coordination gateway. The lesson applicable to Galang Batang lies in strengthening service and documentation capabilities, not in transplanting Mandalika's tourism characteristics into a mineral-processing zone. Research on administrator service models similarly emphasizes personnel capacity, the translation of central decisions into working procedures, and consistent institutional support (Habibi et al., 2025).

Coordination mechanisms should not be judged merely by the frequency of meetings. More substantive process measures include response times to applications, clarity of written recommendations, consistency of requirement lists, and traceability of problem resolution. Repeated meetings without decisions can increase coordination costs. Conversely, well-documented document exchanges can reduce uncertainty even when some decisions require lengthy technical review. Developers can assess governance quality by whether reported constraints are assigned responsible parties and resolution plans, rather than simply by whether a project receives verbal support.

Coastal industrial zones also require coordination between land-use planning and the development of transport facilities. Changes to port or road designs may affect environmental documents, activity boundaries, and permitting sequences. Studies of policy networks in economic-zone projects highlight the importance of treating space as a product of interacting decisions and stakeholder interests rather than as neutral land. Analytically, every change in location or function needs to be examined in relation to the capacity of the relevant agencies and its impacts on neighboring communities (Song et al., 2024).

A particular challenge while expansion areas remain at the planning stage is the variation in status among land parcels. Some activities may have reached the design stage, others may require spatial approvals, and others may not yet have verifiable land-control documents. Consequently, progress reports presenting only aggregate area figures may obscure differences in implementation readiness. Spatial economic analyses of land misallocation risks in other countries' economic zones warn that supplying land unsuited to operational requirements can generate economic costs and weaken investment effectiveness (Cui, 2025).

3. Analysis of the Six Variables in the Van Meter and Van Horn Model

a. Policy Standards and Objectives

Policy standards define legitimate objectives, authorized organizations, and the types of outputs to be achieved. In Galang Batang, standards must be interpreted through the hierarchy of applicable regulations and their derivative technical documents. Ambiguity may arise when stakeholders use the same term for different objects, such as “zone expansion” to describe both a planning idea and a final designation decision. Document analysis must distinguish whether a statement refers to a proposal, recommendation, technical approval, boundary amendment, or construction. Without operational definitions, the relationship between targets and realizations cannot be adequately tested.

Policy objectives can be grouped into at least four categories: administrative, physical, economic, and socioenvironmental. Administrative objectives cover permit completeness and clarity of application status; physical objectives concern the functionality of existing infrastructure; economic objectives concern realized investment and production linkages; and socioenvironmental objectives concern actual employment opportunities and impact management. This distinction matters because each category has different data sources and time horizons. Research on SEZs and local economic development in Indonesia shows

that the effects of investment and infrastructure may become apparent at times that differ from the policy's short-term impacts (Anggraini et al., 2025).

A robust development policy also requires consistency between downstreaming goals and local capacity to participate. If indicators measure only the scale of incoming investment, a policy may be declared successful even when local supplier involvement, skills improvements, or environmental quality have not been measured. Mineral industrialization literature emphasizes that production transformation requires stronger sectoral linkages and policies extending beyond increases in processed-export values. For Galang Batang, this implies the need to formulate tiered objectives that can be verified according to implementation stages and responsible actors (Widyastuti et al., 2026).

Clear standards must also be maintained when the government accelerates service delivery. Acceleration directives should reduce uncertainty over deadlines and coordination channels rather than alter substantive requirements without a legal basis. For example, when a document is under revision, the processing unit should specify deficiencies and criteria for compliance. This makes it possible to evaluate whether processing time is devoted to substantive improvements or hindered by administrative exchanges that could be simplified. With such differentiated indicators, service speed and the quality of oversight can be examined separately.

b. Policy Resources

Implementation resources involve more than the availability of investment funds. Development requires technical experts, document preparation capabilities, geospatial data, land information, permit-review capacity, and administrative system support. The return of the expansion application in October 2025 indicates that a completeness review required follow-up, but it does not establish which resources were insufficient. An accurate assessment requires the revised application and official explanations of the reasons for its return. Corporate capital availability must also be distinguished from the budgetary readiness of public services and oversight, which fall under the responsibility of other agencies.

At the management level, resources include the capacity for phased planning so that essential facilities become available in the appropriate development sequence. Processing projects require functional connections among energy, water, waste management, logistics, labor, and transportation. If one component is delayed, benefits from other facilities may be postponed even where those facilities have been planned separately. Policy modeling research on mineral downstreaming in Indonesia shows that accelerated processing capacity without adequate consideration of resource constraints can create trade-offs between economic outcomes and sustainability. This finding is relevant as a methodological caution, not a direct estimate of Galang Batang's costs (Firmanto et al., 2026).

The resource capacity of public officials must also be assessed measurably. Staffing levels alone do not establish an organization's ability to deliver services if competencies, workloads, information systems, and delegated authority are misaligned. Testable improvements include the availability of job descriptions, working procedures, service-time standards, and application-tracking facilities. Research on economic zones and human capital development highlights the importance of connecting zone policies with skill provision both within industries and in supporting institutions. In implementation, these two dimensions of competence can influence the alignment between policy objectives and achievable results (Sakka & Ghadi, 2023).

Sound resource management requires explicit risk control. Risks may arise from design inconsistencies, commodity price movements, supply certainty, financing capacity, and dependence on third-party infrastructure. Risk mapping of Indonesia's mineral industry emphasizes the need to consider interactions among business and ecosystem governance factors rather than treating project feasibility as a single investment figure. For Galang Batang, managers can use a shared risk register with relevant agencies to prioritize verification and critical decision points without improperly disclosing protected business information (Muhyiddin et al., 2026).

c. Interorganizational Communication and Activities

Policy communication should be interpreted as a traceable process for communicating decisions, not merely as meetings or correspondence. When an expansion application is returned, effective administrative communication should identify the sections requiring revision, the rationale for the requirements, and the parties able to provide clarification. If applicants receive inconsistent explanations, adjustment costs may increase and interpretations may diverge. Communication quality therefore includes information consistency, timeliness, documented responses, and assurance that one institution's decisions can be used by other units.

Communication also has horizontal and vertical dimensions. Horizontal relationships operate among units responsible for spatial, environmental, infrastructure, and investment requirements; vertical relationships link national institutions, local governments, administrators, and technical units. These channels may encounter different obstacles. Experience with SEZ development in various countries indicates that the benefits of economic integration are associated with institutional capacity, trade relationships, and arrangements for cooperation between governments and businesses. This general conclusion reinforces Galang Batang's need for coordination that generates documented decisions usable across organizations (Tekam & Keneck-Massil, 2025).

An integrated information system can improve process transparency when each application has an identification number, responsible officer, current status, and list of requirements. However, digitalization cannot resolve problems where the legal basis of authority is unclear or entered data are outdated. A system that merely stores documents without displaying decision statuses may transfer manual uncertainty into an electronic interface. Studies of the effects of zone policies on corporate digital transformation indicate that institutional incentives can encourage technological change, but technological outcomes require enabling organizational conditions. This analogy is useful for designing administrative services, not for claiming that Galang Batang's digital system has reached a particular level (Bian & Wang, 2025).

Communication with communities needs to distinguish promotional information, consultation, and grievances requiring formal follow-up. Coastal development may affect traffic access, business activities, and perceptions of environmental change. Information channels should facilitate explanations by competent authorities and allow complainants to track the handling of their concerns. Experience with coastal zone management in Indonesia shows that development needs can intersect with access rights and the participation of local groups. Public communication should therefore be considered part of implementation legitimacy, not merely a one-off outreach activity (Pramana et al., 2026).

d. Characteristics of Implementing Organizations

Organizational characteristics concern structural patterns, mandates, procedures, and working relationships that determine implementation capacity. Organizations pursuing the same overall objectives may nevertheless use different measures and time scales. Investment agencies may prioritize project certainty, environmental agencies may assess regulatory compliance, and managers may focus on construction schedules. These differences do not necessarily indicate conflict; functional differentiation is essential for accountable administration. Problems arise when referral mechanisms across authorities are absent or each unit waits for another without clear responsibility.

From an implementation perspective, organizational characteristics should be assessed through standard operating procedures, the scope of delegated responsibilities, recordkeeping quality, and capacity to address cross-sectoral issues. Escalation mechanisms are needed when applications encounter interdependent requirements. However, escalation must not be interpreted as a right to bypass technical decisions. Experience with economic zone development in urban economic studies demonstrates how institutions and spatial arrangements can shape different development patterns, making organizational design sensitive to regional characteristics, industrial interests, and spatial availability (Gao & Wang, 2025).

The differing roles of the private and public sectors must also be understood carefully. Business entities are responsible for development and fulfillment of their commitments, while governments cannot delegate their legal oversight obligations entirely to companies. Literature on corporate performance in economic zones reports results that are not always uniform across management characteristics and policy environments. This lesson underscores that zone governance must evaluate performance according to each actor's responsibilities. A company's success in attracting capital is not equivalent to an agency's success in managing permits, and vice versa (Zheng & Pan, 2024).

Institutional strengthening can be undertaken through a responsibility matrix identifying the proposing, reviewing, approving, and copied units for each activity. Where responsibilities are separated, there must be rules for information exchange and standards for demonstrating completion. This approach supports governance that does not depend on individual officeholders. Studies of the effects of zone policies on allocative efficiency emphasize the importance of accounting for distortions arising from public decisions; hence, improvements to implementing structures should be accompanied by testable rules and transparent reasons for decisions (Lyu et al., 2025).

e. Social, Economic, and Political Conditions

Galang Batang's external conditions are shaped by opportunities for bauxite downstreaming, mineral-product market dynamics, connectivity needs, and the zone's relationship with Bintan's economy. In the source paper, the government reported substantial potential investment in October 2026. This figure underlines the urgency of the policy but does not eliminate the need to monitor infrastructure capacity and labor absorption. A downstreaming agenda emphasizing added value should be tested through linkages with local suppliers and services, rather than merely the physical processing of raw materials. Studies of state development and Indonesia's mineral industry indicate that industrialization requires attention to technological dependence, the capture of added value, and environmental conditions (Muhyiddin, 2026).

Attention to foreign workers must be distinguished from assessments of local worker numbers and company obligations. The source paper cites reports of supervision activities in February 2026; this information indicates inspection activities and relevant compliance issues. However, findings from one inspection activity do not automatically prove that all companies have committed violations. Research evaluating foreign-worker employment policy in Galang Batang illustrates relationships among supervision, worker protection, knowledge transfer, and the legitimacy of zone development. The implication is the need for cooperation among labor agencies, the administrator, and companies under their respective mandates (Hidayat & Movilia, 2026).

Coastal environmental conditions also shape policy sustainability. Planning port facilities, vessel traffic, water use, and industrial process-residue management requires assessment under applicable environmental regulations. From a public administration perspective, necessary indicators include approval status, fulfillment of monitoring obligations, grievance information, and supervisory responses. Research on economic zones and green technology innovation shows that policy support may change firms' incentives to innovate, but this relationship does not remove the obligation to assess each project's actual impacts. Sustainability claims must therefore be based on verifiable documents (Liu et al., 2022).

Comparisons with the development of other zones remind us that spatial utilization may produce consequences beyond greater productivity. Research on capital misallocation arising from place-based policies shows that interventions insufficiently attentive to local economic conditions may impose efficiency costs. This warning is relevant when governments and developers plan space-intensive infrastructure. Site selection must examine actual demand, access to production networks, supply resilience, and the potential utilization of facilities so that public and private investment are not locked into capacity that is not yet needed (Cui, 2024).

The relationship between investment environments and community life can also be understood through experiences in other Indonesian SEZs. Research on Mandalika's development benefits demonstrates the importance of education, skills, infrastructure access, and employment opportunities for communities. Although Galang Batang differs in its type of activity, the normative lesson remains useful: zone benefits should be examined at the household level and in terms of residents' access to opportunities, not merely macro-level indicators. A study of JIIPE Gresik's development likewise provides a comparison concerning the importance of links between industrial investment and local welfare, which can be assessed using area-specific data (Yuli et al., 2025; Iswanto, 2026).

f. Disposition or Attitudes of Implementers

In the implementation model, disposition refers to implementers' understanding of policy objectives, acceptance of responsibilities, and orientation of their actions. Public documents do not provide direct access to the personal motivations of officials or business actors. Therefore, the analysis of disposition is limited to observable organizational behavior demonstrated through official follow-up actions. The resubmission of documents in December 2025 shows a response to the administrative process; the acceleration directives of October 2026 indicate that expansion remained on the policy agenda. However, neither fact can be used to assign a commitment score or assert that all officials held positive attitudes without additional evidence.

Verifiable indicators of disposition should concern the alignment of actions with written obligations. Examples include whether requested revisions were completed, work units responded within their authority, supervisory recommendations were implemented, and decisions were communicated through lawful channels. These measures are more objective than assessing enthusiasm through the number of statements of support.

Within the national downstreaming agenda, framing industrial development as a strategic program may strengthen incentives for coordination. However, policy priorities must be translated into proportionate decisions within each agency. Research on Indonesia's downstream industrial policy indicates that regulatory uncertainty and bureaucratic fragmentation can undermine sustainable industrial achievements even when political direction is strong. Accordingly, disposition assessment should not be separated from the capacity and structures that enable implementers to act. Supportive attitudes cannot overcome missing data, conflicting regulations, or unfulfilled requirements (Sarjito, 2025).

4. Synthesis of Findings, Risk Control, and Improvement Agenda

Studies of industrial zones demonstrate that economic benefits often emerge from a combination of institutional conditions and production readiness. Cross-zone research on new firm formation finds varying impacts across policy levels and activity sectors. For Galang Batang, this means that available zone facilities should be linked to supplier opportunities, logistics quality, and the readiness of local businesses. Institutional improvements should be designed so that administrative efficiency strengthens production activities that can genuinely operate, rather than merely adding to a list of plans without clear implementation status (Li et al., 2023).

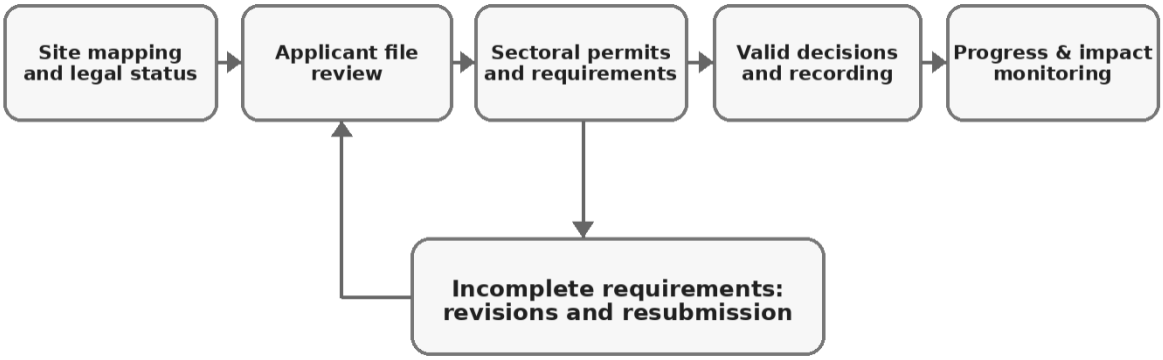
Table 3. Matrix of the Six Implementation Variables and Verification Agenda

Variable	Available secondary evidence	Additional data required
Standards and objectives	Designation regulation; administration rules; master plan	Indicators by location and permit status
Resources	History of revised applications; investment reports	Workloads, data availability, facilities, and financing
Communication	2025 proposal process; 2026 acceleration agenda	Correspondence history, meeting minutes, deadlines, and coordination outcomes
Implementer characteristics	Distribution of mandates among administrators, developers, regional authorities, and ministries/agencies	SOPs, authority matrix, and escalation mechanisms
External conditions	Investment potential; worker compliance; socioenvironmental issues	Employment data, grievances, and monitoring reports
Disposition	Resubmission; reported policy follow-up	Documents confirming compliance with recommendations

Source: Author's synthesis of policy documents and analysis, 2026.

Table 3 pairs each variable with available evidence and information that still needs to be collected. The matrix shows that secondary materials are strongest for analyzing the legal basis and certain administrative events. They are more limited in measuring officials' productivity, implementers' motivations, quality of life, or environmental impacts. By explicitly identifying evidentiary gaps, the article avoids turning missing data into negative assessments. The verification agenda becomes more focused because each information requirement is linked to the relevant variable and responsible authority.

Figure 3. Oversight and Verification Flow for the Proposed SEZ Expansion



Source: Author's conceptual design, 2026.

Figure 3 proposes an oversight sequence beginning with the mapping of locations and legal status, followed by document review, sectoral verification, decision recording, and outcome monitoring. Each stage has verifiable outputs, while applications that do not meet requirements return to the revision stage. Separating these paths allows developers to identify their obligations and enables public agencies to maintain a traceable record of decisions. The mechanism does not replace permitting procedures stipulated by law but can serve as an administrative instrument for managing procedural dependencies.

An integrated monitoring system matters because SEZ benefits are not always apparent in one policy dimension. Studies on the spatial organization of economic zones and territorial formation show that relationships among capital, spatial planning, and infrastructure can generate long-term effects on urban structures and social relations. In Galang Batang, this consideration further supports the need for evaluation beyond initial investment reports. Local governments and managers need to understand whether constructed facilities relate to community logistics access, local enterprises, and legitimate spatial planning requirements (Gao & Wang, 2025).

Zone policies must also address the possibility that incentives and facilities produce different outcomes depending on company characteristics. Literature on research and development investment in economic zones indicates that institutional support can influence business innovation decisions, while market conditions and corporate strategies continue to determine their realization. In Galang Batang, investment in processing technology should not be assumed to automatically transfer knowledge to local workers and suppliers. Indicators of skills, training partnerships, and local product use must be examined specifically if the policy aims to strengthen regional economic capacity (Lahadalia et al., 2024). Findings on varied social impacts also suggest that welfare indicators must be selected carefully. Research on economic zones in China finds improvements

in certain health indicators, while other studies of economic zones show variations in effects on employment and local livelihoods. Neither set of findings can be directly transferred to Galang Batang, but together they demonstrate the need for an evaluation framework broader than investment-fund accounting. If fieldwork is conducted in the future, data collection should include affected areas and comparison areas while controlling for communities' baseline conditions (Guo et al., 2024).

From a strategic industrial governance perspective, successful expansion cannot be measured solely by the issuance of new documents. Facility development must be evaluated according to operational stages and its capacity to generate relevant economic linkages. Research on strengthening economic zones within the global economy shows that success can depend on how zones connect firms, capital, and trade networks. To sustain benefits, governments need process data matched to the scale of decisions. Evidence-based policymaking becomes difficult when promotional figures, investment plans, and realized investment are not reported consistently (Otchia & Wiryawan, 2025).

Overall, this article does not classify Galang Batang's development as either a complete success or an outright failure. Available documents indicate investment activity within the designated zone and an expansion-proposal process involving administrative evaluation. Both are important pieces of information, but they are insufficient for a measurable assessment of all six variables.

CONCLUSION

Implementation of Galang Batang SEZ development policy and its planned expansion reflects a policy extending across multiple jurisdictions, requiring a distinction among the legal basis, planning direction, proposal process, and realized outputs. Government Regulation Number 42 of 2017 designates the existing zone; Government Regulation Number 40 of 2021 provides the administrative framework; and Presidential Regulation Number 1 of 2024 guides the regional master plan. These documents serve different functions. The 2025 sequence of applications and revisions indicates that administrative processes were under way, but the completion status of all expansion requirements still requires verification through up-to-date decision documents.

The six Van Meter and Van Horn variables explain that successful implementation depends on clear objectives, adequate resources, interorganizational communication, characteristics of implementers, socioeconomic and political conditions, and follow-up actions. These variables are interrelated and cannot be represented by a single investment indicator. Secondary information offers the strongest evidence for the policy foundation, some administrative activities, and several realization reports. Assessments of service effectiveness, individual motivation, detailed land readiness, and socioenvironmental impacts still require more comprehensive evidence collection.

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