

Governance Implementation in a Public-Private Partnership Project: Stakeholders' Perspective

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Abstract:

The effectiveness of governance in Public-Private Partnership (PPP) projects is influenced by the relationships among stakeholders. The involvement of diverse stakeholders with varying interests presents a significant challenge. Therefore, this research aims to evaluate the implementation of governance in the Bintang Bano Mini Hydropower Plant PPP Project from the stakeholders' perspective. A qualitative case study approach is employed, with stakeholder theory as the analytical framework. Data were collected through interviews with eight informants and documentation study, and analyzed using the Interactive Model. The evaluation focuses on six aspects of governance: policy, regulation, institutional, stakeholder, transparency, and accountability. The findings indicate that the project has applied good governance principles across these six aspects. However, several challenges remain, such as the lack of integration among sectoral regulations, uncertainty of electricity tariffs, and the lengthy process of procuring an Implementing Business Entity (IBE). These findings contribute to strengthening and improving PPP governance practices, particularly in cross-sectoral projects, through institutional collaboration and stakeholder engagement.

Keywords: PPP; KPBU; governance; stakeholder theory; dam utilization; renewable energy

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INTRODUCTION

Governance implementation involves various actors across multiple levels of government and increases stakeholder diversity through the participation of the private sector and third-party organizations in policymaking and providing public services (Bevir, 2012). Hayllar (2010) highlights that private-sector involvement in public-sector governance is reflected in the *Public Private Partnership* (PPP) scheme for public infrastructure provision. In Indonesia, PPP is known as *Kerja sama Pemerintah dengan Badan Usaha* (KPBU). According to Lima et al. (2021), PPP serves as an alternative for the government to meet infrastructure financing needs while ensuring value for money. In response to a projected funding gap of IDR 753.11 trillion (39.53%) out of the total development funding needs of IDR 1,905.3 trillion for 2025–2029 (Direktorat Jenderal Pembiayaan Infrastruktur Pekerjaan Umum, 2024), the Indonesian government encourages private sector participation through PPP.

Given its long-term nature, PPP requires robust governance mechanisms to promote transparency, contract certainty, and public trust while maintaining project goals (Kwofie et al., 2021). For this reason, Navalersuph & Charoengam (2021) highlight that the government adopts good governance principles from international institutions such as the OECD and UNECE to enhance project performance and ensure the sustainability of infrastructure development. In addition, the need for a proper governance mechanism is motivated by differences in institutional backgrounds (Warsen et al., 2020), the difference in governance perspectives between public and private (Cheung et al., 2010), and the tendency of the involvement of many actors in PPP (Purbo et al., 2019).

Previous studies have identified governance issues in PPP implementation across various countries and sectors, such as research conducted by Navalersuph & Charoenngam (2021) on the Transportation PPP Project in Thailand, Nyanyofio et al. (2022) on Three-District Water Supply PPP Project in the rural water sector in Ghana, Canelas & Alves (2024) on the Affordable Housing PPP Project in Lisbon City, Portugal, and Yahya & Dirgahayani (2020) on the Jatiluhur Regional Water Supply phase I PPP Project in Indonesia. The previous research highlighted governance in PPP projects by focusing on policy, regulatory, institutional, and stakeholder aspects. In contrast to previous research, this research will add aspects of transparency and accountability in evaluating the governance implementation of PPP projects by referring to Chilunjika (2024) on PPP implementation in Sub-Saharan Africa, which emphasizes the importance of implementing transparency and accountability aspects in PPP governance.

This research is conducted based on stakeholders' perspectives because the results of PPP projects are influenced by the role of stakeholders (Amadi et al., 2018). For this reason, this research is supported by *stakeholder theory* introduced by Freeman (1984). Further, Derakhshan et al. (2019) recommend implementing *stakeholder theory* in governance to provide a more comprehensive perspective for organizations, especially on project governance. Therefore, *stakeholder theory* is considered appropriate for identifying and understanding the stakeholders' interaction, exploring their respective interests, and seeing the extent of the parties' involvement in implementing PPP project governance in this research.

Despite the growing implementation of PPPs in Indonesia, limited research has evaluated their governance mechanisms from stakeholders' perspective. This gap is particularly evident in complex, cross-sector projects involving multiple ministries and regulatory frameworks. Therefore, this research focuses on the Bintang Bano Dam Maintenance and Provision of Mini Hydro Power Plant Infrastructure Capacity of 6,3 MW ("Bintang Bano Mini Hydropower Plant PPP Project"). This is the first unsolicited PPP project in Indonesia to utilize a Ministry of Public Works dam for hydropower infrastructure. The project is highly complex, as it spans two infrastructure sectors: water resources (dam) and electricity (power plant). This unique characteristic reinforces its complexity and makes it a valuable case for evaluating cross-sectoral governance in PPP implementation, particularly across six aspects: policy, regulation, institutional, stakeholder, transparency, and accountability.

Theoretically, this study contributes to the application of stakeholder theory in the context of public sector governance. Practically, it offers insights into improving governance implementation in PPP projects and serves as a reference for addressing governance aspects that remain suboptimal.

RESEARCH METHODS

This research uses a qualitative research method with a case study approach to explore a case through detailed and in-depth data collection using various sources of information (Creswell & Poth, 2018). The data used in this study is sourced from primary data in the form of individual interviews and secondary data obtained physically and digitally from related institution and online. The data collection technique used in this study was a semi-structured interview and documentation. Parties who provide important information or other sources of evidence in the interview process used as the basis for further investigation are referred to as 'informants' (Yin, 2018). This research interviewed eight informants as representatives of stakeholders directly involved in the Bintang Bano Mini Hydropower Plant PPP Project, namely the Ministry of Public Works, the Ministry of Energy and Mineral Resources, PT Brantas Abipraya (Persero), and PT PLN (Persero). Interviews are conducted by asking open-ended questions to informants face-to-face or online through Google Meet. In addition to interviews, data collection techniques through documentation are also carried out on data sources in the form of documents collected during this research process. This research uses data triangulation and method triangulation to validate the data obtained.

The data analysis technique used is an interactive model introduced by Miles et al., (2014) namely three data analysis activities (data condensation, data display, and drawing and verifying

conclusions) are carried out in parallel. Meanwhile, in conducting data analysis, this study compares the findings of governance implementation in the Bintang Bano Mini Hydropower Plant PPP Project obtained from the results of interviews with the evaluation criteria compiled referring to international recommendations for the implementation of good governance in PPP by UNECE (2008) and OECD (2012) in Table 1.

Table 1. Evaluation Criteria

Criteria	Reference Source
Policy Aspects	
a. Government's commitment to supporting PPP.	OECD (2012) Principle 1
b. Coherence of existing strategic policies.	UNECE (2008) Principle 1
c. Project alignment with national development priorities.	OECD (2012) Principle 4
d. Economic and social benefits and <i>value for money</i> as the basis for consideration of government decisions.	UNECE (2008) Principle 1 & 6; OECD (2012) Principle 4 & 5
Regulation Aspects	
a. Clear legal framework regulations that support each other and do not overlap.	OECD (2012) Principle 3; UNECE (2008) Principle 3
b. Simplification of bureaucracy or obstructive regulations.	OECD (2012) Principle 3; UNECE (2008) Principle 3 & 4
c. Proper risk allocation.	UNECE (2008) Principle 4; OECD (2012) Principle 6
Institutional Aspects	
a. Clear institutional structure.	OECD (2012) Principle 2
b. Institutional and staff capacity is adequate.	UNECE (2008) Principle 2
Stakeholder Aspects	
a. Stakeholders are actively involved in the PPP implementation process.	OECD (2012) Principle 1; UNECE (2008) Principle 1 & 6
b. The community and end users have been involved since the planning of the PPP project through public participation mechanisms.	OECD (2012) Principle 1; UNECE (2008) Principle 3 & 6
Transparency Aspect	
a. Information disclosure throughout the project cycle (including during the PPP procurement process to all bidders), accompanied by public access to information while maintaining the confidentiality of certain sensitive data.	OECD (2012) Principle 3; UNECE (2008) Principle 5 & 6
b. The procurement process is open, transparent, competitive, neutral, and fair.	OECD (2012) Principle 9; UNECE (2008) Principle 5
c. Mechanisms are in place to ensure the integrity of the procurement process.	OECD (2012) Principle 12
Accountability Aspect	
a. The project accountability structure is clearly defined.	OECD (2012) Principle 2
b. Regular and transparent monitoring and evaluation of project performance by independent parties.	UNECE (2008) Principle 6; OECD (2012) Principle 2

RESULTS AND DISCUSSION

PPP Project Overview

Bintang Bano Mini Hydropower Plant PPP Project is an unsolicited project initiated by PT Brantas Abipraya (Persero). This project's Government Contracting Agency (GCA) is the Minister of Public Works. Implementation of PPP projects *unsolicited* is done by referring to the applicable

regulations, namely Presidential Regulation No. 38 of 2015 on Public Private Partnership for Infrastructure Provision, along with other supporting regulations. In addition, this project refers to the internal regulations of the Ministry of Public Works, namely the Regulation of the Minister of Public Works and Housing No. 21 of 2018 concerning Implementation Guidelines of Public Private Partnership for Infrastructure Provision at the Ministry of Public Works and Housing which was later revoked and replaced with Regulation of the Minister of Public Works and Housing No. 2 of 2021 concerning Implementation Guidelines of Public Private Partnership for Infrastructure Provision ("Regulation of the Minister of Public Works and Housing No. 2 of 2021").

The Bintang Bano Mini Hydropower Plant PPP Project aims to optimize the use of the Bintang Bano Dam as a renewable energy source through a hydropower plant while supporting the increase in the electrification ratio in West Sumbawa Regency, which previously the dam was only used for irrigation, raw water, flood control, and tourism. The scope of this PPP scheme is *design-build-finance-operate-maintenance-transfer* (DBFOMT) to provide the Bintang Bano Mini Hydropower Plant infrastructure and maintain the Bintang Bano Dam. The partnership period on this project is 27 years and 2 months from the date of signing the PPP Agreement (two years of construction and 25 years Take or Pay). The Bintang Bano Mini Hydropower Plant PPP Project has an investment value of IDR 167.05 billion with a return on investment using a *user charge* (tariff) scheme. The revenue of the Implementing Business Entity (IBE) comes from selling the electricity to PT PLN (Persero) as an offtaker. In addition, IBE is responsible for contributing a portion or all of the operating and maintenance costs of the Bintang Bano Dam through a contribution cost of a certain nominal amount.

Evaluation of Governance Implementation

In this research, governance implementation was carried out by observing practices based on the perspectives of stakeholders represented by eight informants. Subsequently, an evaluation was conducted on six aspects of governance by comparing existing practices with good governance recommendations in implementing PPP, according to UNECE (2008) and OECD (2012).

1. Policy Aspects

The government has shown commitment to supporting the implementation of the PPP scheme by encouraging the PPP scheme as an alternative financing scheme. In addition, the government also issued a policy regarding the acceleration of the use of renewable energy. However, the existing strategic policies have not been integrated into supporting the acceleration of dams built by the Ministry of Public Works to provide hydropower plant infrastructure, especially the Bintang Bano Mini Hydropower Plant PPP Project. This disintegration poses challenges in policy alignment between sectors. UNECE (2008) emphasizes the importance of coordination and collaboration between government agencies so there is no overlap or contradiction between sectoral policies. Furthermore, strategic policies through existing regulations have not provided investors with certainty in determining electricity tariffs that will become income for business entities. Wang et al. (2024) states that government policies are key elements in minimizing risks regarding renewable energy investments, increasing market certainty, and encouraging private sector engagement.

Nevertheless, the Bintang Bano Mini Hydropower Plant PPP Project is aligned with national development priorities by optimizing the function of the Bintang Bano Dam. In addition, the Bintang Bano Mini Hydroelectric Power Plant PPP Project was implemented to meet electricity needs through the Sumbawa-Bima distribution quota in the Electricity Supply Business Plan (RUPTL) document period 2021-2030. Furthermore, this project has been listed in the PPP Book since 2022 by the Ministry of National Development Planning/National Development Planning Agency (Bappenas).

In addition, based on the results of interviews with informants and documentation studies, it is known that GCA assesses the fulfillment of requirements. The document evaluation results pay attention to the value of economic and social benefits, the project's potential, and Value for Money

(VfM) in determining whether this project will be carried out through a PPP scheme. The VfM assessment is the main criterion in decision-making between PPP or conventional procurement mechanisms. (Zhao et al., 2023). On the other hand, the Procurement Committee has selected IBE using bidding parameters in the form of the most significant contribution value of dam operation and maintenance without excluding project feasibility indicators.

2. Regulation Aspects

An adequate legal framework has supported the implementation of the Bintang Bano Mini Hydropower Plant PPP Project, including the legal framework for implementing PPP and renewable energy, ranging from the availability of presidential regulations to ministries/institutions regulations. However, integration between regulations is still challenging when implementing the PPP scheme in the Bintang Bano Mini Hydropower Plant PPP Project. This project requires the synchronization of regulations between sectors to not cause uncertainty for investors and to ensure the sustainability of project implementation. Regulations that support the determination of electricity tariffs at the beginning of the IBE procurement process are crucial in ensuring the project's feasibility. In addition, business entities that have been determined as the winner of the IBE procurement must carry out the procurement process at PT PLN (Persero) through the Direct Appointment mechanism by applicable regulations in the electricity sector, even though this stage is not listed in the PPP regulatory stage. For this reason, it is necessary to simplify the process by simplifying procurement mechanisms to accelerate the implementation of the PPP scheme and realize the achievement of the renewable energy mix target. This simplification is essential to ensure that the procurement process only needs to be done once, involving the Ministry of Public Works, the Ministry of Energy and Mineral Resources, and PT PLN (Persero). Chilunjika (2024) emphasized that a strong legal and regulatory framework can clarify the legal authority in granting concessions, procurement processes, assets owned by public authorities that can support the project's feasibility, and tariff adjustment mechanisms to ensure the project's economic feasibility. In addition, the informant said that provisions regarding the contribution cost of dam operation and maintenance also need to be agreed upon so that it can be taken into account in the electricity tariff component by PT PLN (Persero).

Regarding risk allocation, the Bintang Bano Mini Hydropower Plant PPP Project initiator has prepared a risk allocation in the Feasibility Study Document. Based on information from informants, the risk allocation for the Bintang Bano Mini Hydropower Plant PPP Project was formulated by considering the ability of the parties to be risk managers and the authority of each party. In addition, the characteristics of dam infrastructure and PLTM are also considered. However, there is a possibility of changes in risk allocation when discussing the sharing of rights and obligations outlined in the PPP Agreement between GCA and IBE. Therefore, stakeholders must agree on risk allocation and mitigation before signing a PPP agreement (Yahya & Dirgahayani, 2020).

3. Institutional Aspects

The institutional framework for PPP in the Bintang Bano Mini Hydropower Plant PPP Project is within the Ministry of Public Works. This institutional framework is based on the Regulation of the Minister of Public Works and Housing No. 2 of 2021, which states that the Minister acts as a GCA and can give a mandate to the Director General to become a GCA following his duties and functions through a Ministerial Decree without eliminating the Minister's responsibility as a GCA. For this reason, the Minister for Public Works and Housing gives a mandate to the Director General of Public Works and Housing Infrastructure Financing to carry out activities at the initiation stage to the transaction stage, and the Director General of Water Resources in terms of signing PPP Agreements, implementing PPP agreements, and supervising the performance of business entities based on the PPP Agreement. Furthermore, the Director General of Public

Works and Housing Infrastructure Financing formed a PPP Team and a Procurement Committee to implement the Bintang Bano Mini Hydropower Plant PPP Project. This institutional framework describes the separator of each party's roles, duties, and functions. In addition, the Bintang Bano Mini Hydropower Plant PPP Project also involves stakeholders from institutions outside the Ministry of Public Works, such as the Ministry of Energy and Mineral Resources and PT PLN (Persero), with their respective roles, duties, and responsibilities.

Based on the results of interviews with informants, the internal capacity of the PPP institutional framework can carry out the Bintang Bano Mini Hydropower Plant PPP Project, following their respective fields and expertise. However, there is still a need for knowledge transfer for the parties in connection with this technical and non-technical PPP project. In their research, Navalersuph & Charoenngam (2021) found that a lack of skills and experience in executing PPP contracts and project technical operations resulted in project delays and loss of revenue.

4. Stakeholder Aspects

Based on the stakeholder theory introduced by Freeman (1984), this study identifies and classifies stakeholders involved in the Bintang Bano Mini Hydropower Plant PPP Project. The process of identifying and classifying stakeholders is carried out using data obtained through interviews with informants. Furthermore, stakeholders are grouped into direct and indirect stakeholders by considering the involvement and interaction that occurs.

Direct stakeholders are actors who are directly involved and have authority in the implementation of PPP schemes at the PPP initiation stage, PPP preparation stage, and PPP transaction stage. The direct stakeholders in the Bintang Bano Mini Hydropower Plant PPP Project are described as follows:

- a. Ministry of Public Works (formerly known as the Ministry of Public Works and Housing) plays a central role, with the Minister of Public Works as the GCA and supported by organizational units, namely the Directorate General of Public Works and Housing Infrastructure Financing (DGIF) and the Directorate General of Water Resources (DGWR), in carrying out the mandate of authority given.
 - 1) Directorate of Water Resources Infrastructure Financing, as a directorate of DGIF, prepares projects from the preparation phase to the PPP agreement preparation stage.
 - 2) Directorate of Dams and Lakes, as a directorate of DGWR, has been involved in technical planning (especially the preparation of hydrological data, technical studies, and the feasibility of using dam water), providing technical data support and input to project documents, and providing technical support in the operation of overall dam management.
 - 3) River Basin Organization for Nusa Tenggara I Mataram is a technical center under the DGWR responsible for managing water resources within the river basin and overseeing the implementation of operations and maintenance activities. In addition, representatives from the organization also involved as one of the Procurement Committee.
 - 4) Procurement Committee consists of representatives from the working units of DGIF and DGWR and is responsible for carrying out the IBE procurement process.
 - 5) Inspectorate General and Directorate of Construction Services Procurement, Directorate General of Construction Development are involved in the implementation of quality assurance on the Bintang Bano Mini Hydropower Plant PPP Project.
- b. PT Brantas Abipraya (Persero), as the project initiator, prepared the project according to its obligations and participated in the procurement process for the IBE as a bidder. Based on the results of the IBE procurement, PT Brantas Abipraya (Persero) was declared the winner of the IBE procurement for the Bintang Bano Mini Hydropower Plant PPP Project.
- c. Ministry of Energy and Mineral Resources through the Directorate of Various New Energy and Renewable Energy, the Directorate General of New, Renewable Energy and Energy Conservation is the coordinator in the Power Purchase Agreement (PPA) process by ensuring

that the Bintang Bano Mini Hydropower Plant PPP Project is included in the RUPTL by PT PLN (Persero).

- d. PT PLN (Persero) conducts the procurement process through the Direct Appointment mechanism for the Bintang Bano Mini Hydropower Plant PPP Project. PT PLN (Persero) is an *offtaker* that will sign PPA with IBE.

Indirect stakeholders in the Bintang Bano Mini Hydropower Plant PPP Project consist of supporting Ministries/Institutions such as the Ministry of National Development Planning/National Development Planning Agency (Bappenas) in monitoring and evaluating the project, the Ministry of Investment/BKPM helping to offer investment opportunities in this project, and the National Public Procurement Agency (LKPP) providing technical consulting support. In addition, Regional Governments, Business Entities, and Financial Institutions were also involved in the Market Consultation of the Bintang Bano Mini Hydropower Plant PPP Project. Meanwhile, in the implementation of IBE procurement, there are Business Entities and Financial Institutions who are present as participants in the Market Interest Confirmation, business entities participating in the procurement of IBE who follow the procurement process, and electricity experts who provide consultation on electricity technical experience to the Procurement Committee.

The involvement of stakeholders based on the above description reflects the parties' active role in the PPP implementation process in accordance with their respective roles and capacities. However, differences in sectoral priorities make coordinating challenging. Nevertheless, collaboration between stakeholders is regarded as being quite robust.

On the other hand, the involvement of the community and end users in the process of preparing the Bintang Bano Mini Hydropower Plant PPP Project is still limited because the end users in this project are not the community directly but PT PLN (Persero) as *offtaker*. UNECE (2008) recommends community empowerment through participation in decision-making since the project is still in the planning stage and creates a mechanism for public participation in PPP projects. For this reason, the government has conducted a Public Consultation at the planning stage and the preparation of a feasibility study for the construction of the Bintang Bano Dam, as well as involving a small part of the community during the preparation of the feasibility study document by the initiator of the Bintang Bano Mini Hydropower Plant PPP Project. Based on information obtained from informants of PT Brantas Abipraya (Persero), the construction and operational stages of the project are expected to involve more local communities while still looking at the required qualifications. In addition, the government organized a Market Consultation on May 23, 2022, as a public participation mechanism in the Bintang Bano Mini Hydropower Plant PPP Project. This activity was attended by the Ministry of National Development Planning/National Development Planning Agency (Bappenas), Ministry of Investment/BKPM, Ministry of Energy and Mineral Resources, Ministry of Environment and Forestry (KLHK), LKPP, Regional Government, PT PLN (Persero), business entities, investors, and financing institutions.

5. Transparency Aspect

The implementation of transparency aspects in the Bintang Bano Mini Hydropower Plant PPP Project has been carried out through the disclosure of project information throughout the implementation of PPP. This aligns with Chilunjika (2024) research that transparency in the PPP scheme reflects the procedures for regulating project planning and implementation, including the procurement and selection process, which should be implemented openly and systematically. The information disclosure is carried out by introducing the Bintang Bano Mini Hydropower Plant PPP Project to the public through Market Consultation. In addition, the public can access project information through the PPP Book published by the Ministry of National Development Planning/National Development Planning Agency (Bappenas) and the Simpul KPBU website owned by GCA. Based on the results of the documentation study, the shortcoming is that the information on the Simpul KPBU website is not updated regularly.

Meanwhile, information disclosure in the implementation of IBE procurement was carried out by including the announcement of the prequalification of the Bintang Bano Mini Hydropower Plant PPP Project through the Jakarta Post media, the DGIF website, and the Ministry of Public Works website. Furthermore, the procurement process uses the SIPADU website so that all participants obtain information equally. However, there is a difference in the depth of information obtained when implementing IBE procurement. According to the information confidentiality provisions, only participants who passing Pre-qualification and having submitted the Confidentiality Letter are granted access to the Data Room.

Zawawi *et al.* (2022) emphasized that a competitive procurement process is needed to implement good governance. In line with this statement, the IBE procurement process for the Bintang Bano Mini Hydropower Plant PPP Project has been carried out by fulfilling the procurement principles, namely transparency, openness, fairness, and competitiveness. However, according to the Procurement Committee informant, the IBE procurement process is considered ineffective regarding implementation time and procurement process. This ineffectiveness can be seen from the length of the IBE procurement process, which took more than one year, and the Direct Appointment process for tariff negotiations at PT PLN (Persero), which is still ongoing. For this reason, arrangements are needed to minimize the implementation time of the procurement process by reducing unnecessary bureaucracy and procedures (Zawawi *et al.*, 2022). However, there is a Quality Assurance by the Inspectorate General of the Ministry of Public Works to maintain the integrity of the IBE procurement process in the Bintang Bano Mini Hydropower Plant PPP Project. The Quality Assurance is accomplished following the Instruction of the Minister of Public Works and Housing No. 1 of 2022 concerning the Winner Determination Process for Public Procurement and PPP in Ministry of Public Works and Housing. The Quality Assurance process is also considered a form of implementing accountability by the Procurement Committee.

6. Accountability Aspect

The Bintang Bano Mini Hydropower Plant PPP Project has implemented an accountability aspect through a clear project accountability structure. The division of authority and responsibility according to their respective roles in implementing the PPP scheme within the Ministry of Public Works has been regulated through the Regulation of the Minister of Public Works and Housing No. 2 of 2021. In support of this, based on the results of a documentation study on the Decree of the Minister of Public Works and Housing No. 748/KPTS/M/2022 concerning the Mandate of Part of the Authority of the Minister of Public Works and Housing as the Government Contracting Agency of Public Private Partnership in the Bintang Bano Dam Maintenance and Provision of Mini Hydro Power Plant Infrastructure, it was found that the Minister of Public Works and Housing delegated part of the Minister's authority through the division of duties and responsibilities between the Director General of Public Works and Housing Infrastructure Financing and the Director General of Water Resources are stated in detail. Furthermore, the Director General of Public Works and Housing Infrastructure Financing and the Director General of Water Resources report to the Minister of Public Works and Housing every six months or at any time if needed as a form of accountability. In addition, based on the Decree of the Director General of Public Works and Housing Infrastructure Financing, the PPP Team and the Procurement Committee that have been formed are responsible to the Director General of Public Works and Housing Infrastructure Financing. The accountability mechanism for the Bintang Bano Mini Hydropower Plant PPP Project is carried out through reporting and documentation to the GCA in stages. In addition, the accountability reports prepared by the Directorate of Water Resources Infrastructure Financing are in the form of annual reports and performance reports, in which there is progress in implementing the Bintang Bano Mini Hydropower Plant PPP Project. Meanwhile, as the initiator, PT Brantas Abipraya (Persero) is accountable to GCA regarding fulfilling the required requirements.

Based on information from the Ministry of Energy and Mineral Resources informant the division of duties, functions, and responsibilities between the Ministry of Public Works and the Ministry of Energy and Mineral Resources in the Bintang Bano Mini Hydropower Plant PPP Project has been carried out following the main tasks and functions of each ministry. This separation of authority is evident in synchronizing the Ministry of Public Works' dam potential with the renewable energy mix target. Chilunjika (2024) emphasized that PPP is crucial in establishing relationships and entities that enhance accountability.

Other aspects of accountability are implemented through monitoring and evaluation. Monitoring and evaluating the Bintang Bano Mini Hydropower Plant PPP Project is carried out by the internal DGIF regularly, both through weekly and monthly performance reporting and quarterly and annual evaluation activities of the Directorate of Water Resources Infrastructure Financing. In addition, monitoring and evaluation are also carried out by the external institution of the Ministry of Public Works, namely the Ministry of National Development Planning/National Development Planning Agency (Bappenas). Because this project is still in the transaction stage, the monitoring and evaluation are limited to the issues and obstacles faced in the PPP stage. Monitoring and evaluation for the performance of the Bintang Bano Mini Hydropower Plant PPP Project can only be carried out when this project has entered the implementation stage of the PPP Agreement. During the implementation of the PPP scheme by the Ministry of Public Works from the preparation stage to the transaction stage, the Ministry of Energy and Mineral Resources is not involved in direct monitoring and evaluation. However, it obtains information on the project's progress through joint discussions. Furthermore, when the project is already in the implementation stage of the PPP Agreement, monitoring and evaluation of project performance will be carried out by the Ministry of Public Works, the Ministry of Energy and Mineral Resources, and PT PLN (Persero) following the agreement in the PPP Agreements and PPA. Therefore, in the future, a joint forum is needed to monitor and evaluate the Bintang Bano Mini Hydropower Plant PPP Project regularly.

CONCLUSION

This research evaluated the implementation of governance in the Bintang Bano Mini Hydropower Plant PPP Project across six key aspects from the stakeholders' perspective. The project demonstrates alignment with good governance principles, supported by clear policies, institutional structure, and stakeholder engagement. However, several challenges remain, including the lack of integration among sectoral regulations—particularly regarding electricity tariff certainty and the inclusion of operations and maintenance costs in tariff calculations. Institutional capacity and technical knowledge also require further enhancement. While transparency and accountability mechanisms are in place, improvements are needed in public information updates and procurement efficiency. To enhance oversight during the operational stage, establishing a cross-institutional forum is recommended for joint monitoring and evaluation.

Limitations and Future Research

This study contributes to stakeholders' understanding of the implementation of governance in dam utilization PPP projects to provide hydropower plant infrastructure. It is expected to serve as a consideration for implementing further improvements in aspects of governance that are not yet optimal. Nevertheless, this case study research is not without limitations. The stakeholder perspective in this research is limited to the eight key informants interviewed. For this reason, forthcoming research endeavors may involve the participation of other relevant stakeholders and the consideration of additional governance aspects, such as sustainability, to obtain a more comprehensive perspective on implementing governance mechanisms within the context of PPP projects.

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