

Strengthening public-private partnerships in Bangladesh: Institutional challenges and strategic reforms for vision 2041

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CITATION

Rahman A. (2026). Strengthening public-private partnerships in Bangladesh: Institutional challenges and strategic reforms for vision 2041. *Journal of Infrastructure Policy and Development*. 10(1): 11934. <https://doi.org/10.24294/jipd11934>

ARTICLE INFO

Received: 4 December 2025
Accepted: 26 March 2026
Available online: 1 April 2026

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Abstract: Bangladesh's path to upper-middle-income status by 2041 hinges on transformative infrastructure expansion, with annual investment needs estimated at USD 10–12 billion. Conventional public financing mechanisms are insufficient to meet this demand, especially as external aid flows decline in the post-LDC transition. This study positions Public-Private Partnerships (PPPs) not as a supplementary tool, but as a strategic imperative for bridging fiscal gaps, mobilizing private capital, and accelerating infrastructure delivery across transport, energy, and urban services. Building on global PPP models and Bangladesh's policy evolution since 2010, the study reviews frameworks from the UK, Australia, India, and China. At the same time, the study also examines domestic challenges through reports and field-level experience. It incorporates practitioner insights from the roles in the Bangladesh Economic Zones Authority (BEZA), the Dhaka Bypass Expressway, and the Planning Commission. The study uses a mixed-method approach combining document analysis, comparative case studies, and implementation experience to highlight the need for bankable project design, transparent procurement, and inclusive governance. It contributes to the policy discourse on development financing and institutional reform, offering strategic recommendations for policymakers, development partners, and civil society. It also shows how PPPs can advance key Sustainable Development Goals (SDGs), including clean energy, decent work, innovation, and urban resilience.

Keywords: infrastructure finance; project management; procurement systems; supply chain governance; risk allocation; sustainable development goals

1. Introduction

Bangladesh's aspiration to achieve upper-middle-income status under Vision 2041 demands unprecedented levels of infrastructure investment, estimated at USD 10–12 billion annually. This ambition entails transformative upgrades in transport connectivity, energy generation, and urban service delivery, which are foundational to inclusive growth, industrial competitiveness, and sustainable development. Yet, public resources alone cannot meet this financing gap, and traditional aid flows are declining as the country transitions from Least Developed Country (LDC) status. In this context, Public-Private Partnerships (PPPs) have emerged not merely as an alternative financing mechanism but as a strategic necessity to mobilize private capital, advanced technologies, and implementation expertise.

Unlike conventional public sector projects that rely solely on government financing and execution, PPPs allocate significant responsibilities and risks to private partners. This model is designed to enhance efficiency, ensure value for money, and improve service delivery. International experiences, including the United Kingdom's Private Finance Initiative (PFI), Australia's Partnerships Victoria, and

large-scale PPP adoption in India, China, and Vietnam, demonstrate how well-structured PPPs can accelerate infrastructure development while alleviating fiscal burdens and advancing national development goals.

These international lessons provide useful benchmarks, yet Bangladesh's PPP journey reflects distinct institutional constraints. While notable progress has been made since 2010 in establishing PPP institutions and frameworks, challenges persist in project bankability, procurement systems, and stakeholder coordination. Existing literature offers valuable insights into global PPP models and Bangladesh's evolving landscape, but few studies integrate comparative lessons with field-level experience to propose reform pathways tailored to Vision 2041. This study addresses that gap by combining document analysis, comparative case studies, and practitioner-level insights from the author's roles in the Bangladesh Economic Zones Authority (BEZA), the Dhaka Bypass Expressway and the Planning Commission. It critically examines the opportunities and constraints of PPP implementation in Bangladesh and proposes strategic reforms to enhance project preparation, financing innovation and institutional capacity.

This study contributes to the PPP literature by combining policy analysis with practitioner-level insights drawn from the author's professional experience in Bangladesh. By integrating global lessons with field realities, it offers a grounded perspective on PPP performance in emerging economies and proposes practical reform priorities aligned with Vision 2041.

1.1. Research purpose, objectives and research questions

To guide the analysis, this study sets out several research objectives and questions that frame the examination of Public-Private Partnerships (PPPs) in Bangladesh. This study aims to examine the institutional challenges affecting the implementation of Public-Private Partnerships (PPPs) in Bangladesh and to identify policy and governance reforms that can strengthen PPP delivery in support of Vision 2041.

1.1.1. Research objectives

1. To examine the institutional and governance challenges affecting PPP implementation in Bangladesh.
2. To analyze international PPP practices and their relevance for Bangladesh's infrastructure development strategy.
3. To propose policy and governance reforms that can strengthen PPP project preparation, financing, and delivery in support of Vision 2041.

1.1.2. Research questions

1. What institutional and operational challenges constrain the effective implementation of PPPs in Bangladesh?
2. How can lessons from international PPP practices inform improvements in Bangladesh's PPP framework?
3. What policy reforms are necessary to enhance PPP project bankability, governance, and long-term sustainability?

2. Global context and literature review

2.1. International PPP models

Public-Private Partnerships (PPPs) have become a globally recognized mechanism for mobilizing private finance and expertise to deliver public infrastructure and services. Experiences across developed and emerging economies illustrate both the transformative potential and the inherent complexities of PPP models, offering valuable lessons for Bangladesh. International frameworks such as the UK's Private Finance Initiative (PFI), Australia's Partnerships Victoria, and India's hybrid annuity model demonstrate how PPPs can accelerate infrastructure delivery while mitigating fiscal burdens. Multilateral institutions, including the World Bank, Asian Development Bank (ADB), and OECD, have also emphasized the role of PPPs in achieving Sustainable Development Goals (SDGs), particularly in energy, transport, urban development and institutional reform.

Recent research further highlights that PPPs have become a widely adopted mechanism for mobilizing private finance and managerial expertise for infrastructure development worldwide. Empirical studies indicate that PPP arrangements can enhance infrastructure delivery efficiency, accelerate project implementation, and support large-scale investment when supported by strong governance frameworks and transparent procurement systems (Roehrich, Lewis, & George, 2021; Hodge & Greve, 2022; Osei-Kyei & Chan, 2021). The literature further emphasizes that successful PPP implementation depends on balanced risk allocation, adequate institutional capacity, and robust regulatory frameworks that align incentives between public and private partners (Zhang, Chan, & Feng, 2022).

Despite their successes, many PPPs have faced criticism over cost overruns, opaque contract structures and questions about long-term public accountability. These concerns underscore the need for context-sensitive design, robust oversight and inclusive governance. Recent literature also highlights the importance of structured project management methodologies (e.g., PRINCE2, PMBOK, Agile) in managing complexity, aligning stakeholder interests, and ensuring timely delivery. These insights are especially relevant for Bangladesh as it seeks to scale PPPs under Vision 2041 and embed sustainability, resilience, and equity into its infrastructure strategy.

United Kingdom

The United Kingdom pioneered the Private Finance Initiative (PFI) in 1992, establishing one of the most mature PPP markets globally. PFI was applied extensively across transport, health, education, and social infrastructure (HM Treasury, 2012). While it accelerated project delivery and mobilized private capital, concerns emerged over long-term cost efficiency, transparency, and risk allocation. In response, the UK government introduced Private Finance 2 (PF2) in 2012. This reformed PPP model aimed to improve value for money, increase contract transparency, and allow public sector equity participation.

Australia

Australia's PPP practice evolved from the Build-Own-Operate-Transfer (BOOT) model to a more structured approach aligned with the UK's PFI. Victoria

led the way with Partnerships Victoria (2000), contracting 29 PPP projects worth over AUD 15.6 billion by 2017 (State Government of Victoria, 2015). Other states, including New South Wales and South Australia, followed suit. At the federal level, Infrastructure Australia (2008) was established to provide independent policy advice and coordinate national infrastructure development (Appleby, 2012). Australia's PPPs are distinguished by rigorous feasibility assessments, transparent procurement, and embedded project management methodologies such as PRINCE2 and PMBOK, contributing to SDG-aligned outcomes in transport, health, and education.

United States

The U.S. PPP landscape is dominated by transport infrastructure. Between 1989 and 2011, over 96 PPP projects worth USD 54.3 billion were initiated (Reinhardt, 2011). The National Council for Public-Private Partnerships (NCPPP) plays a key role in promoting best practices, though PPP adoption varies by state and sector. While the U.S. lacks a unified federal PPP framework, its experience highlights the importance of decentralized innovation, stakeholder engagement, and sector-specific expertise

India and South Asia

India leads South Asia in PPP adoption, accounting for 90% of regional PPPs reaching financial close in 2014 (World Bank, 2014). Key enablers include the Viability Gap Fund (VGF), Project Development Fund (PDF), and strong political commitment. While a central PPP law remains pending, several states have enacted their own frameworks. India's experience underscores the importance of financial incentives, policy flexibility, and robust project preparation. These lessons are highly relevant for Bangladesh's infrastructure ambitions under Vision 2041.

Emerging Asia and beyond

Vietnam has expanded highways and power plants under PPPs, supported by clear risk-sharing frameworks that attract foreign investment (Asian Development Bank, 2020a). China has built one of the world's largest PPP portfolios, spanning urban infrastructure, energy, and transport, driven by strong state-private coordination and massive capital mobilization (OECD, 2018). Both countries demonstrate how PPPs can be scaled rapidly when aligned with national development strategies and institutional capacity. Their experiences offer insights for SDG-linked infrastructure delivery in other emerging economies.

2.2. Key lessons from global practice

Global evidence suggests that well-structured PPPs can:

- Mobilize private capital for infrastructure investment
- Transfer advanced technologies and management practices
- Accelerate project delivery compared to conventional procurement
- Improve long-term service quality and operational efficiency
- Enhance accountability through performance-based contracts and monitoring systems
- Promote inclusive development by integrating social safeguards and community engagement

- Stimulate domestic industry participation through local sourcing and joint ventures
- Support climate resilience and green growth through renewable energy and sustainable infrastructure solutions

Recent literature also highlights the growing role of structured project management in PPP success. Methodologies such as PRINCE2, PMBOK and Agile are increasingly used to manage complexity, align stakeholder interests, and ensure timely delivery. These lessons are particularly relevant for Bangladesh as it seeks to scale PPPs under Vision 2041 and address persistent implementation challenges.

2.3. Bangladesh context

In Bangladesh, several studies have examined PPP implementation challenges, including governance gaps, land acquisition delays, and limited private sector capacity (Bhuiyan, 2023; Ullah, Rahman, & Islam, 2023). Institutional reports from the PPP Authority (2024) and Infrastructure Investment Facilitation Company (IIFC, n.d.) have also highlighted the need for stronger project preparation, financing innovation, and inter-agency coordination. Recent comparative research on PPP implementation in developing economies indicates that governance capacity, regulatory stability, and project preparation quality are critical determinants of PPP success. Studies highlight that weak feasibility analysis, unclear risk allocation, and fragmented institutional coordination often undermine PPP performance in emerging economies (Roehrich et al., 2021; Zhang et al., 2022). These findings resonate strongly with the experience of Bangladesh, where several infrastructure projects have faced delays due to land acquisition constraints, limited technical expertise, and coordination gaps among implementing agencies.

Despite progress in establishing legal and procedural frameworks such as the PPP Act (2015), Viability Gap Financing Rules (2018) and G2G Partnership Policy (2017), execution bottlenecks persist. These challenges are evident at both national and local levels.

Recent field-level experience suggests that awareness of the PPP model remains uneven across government agencies, and technical capacity for project structuring is still evolving. Many projects face delays due to fragmented stakeholder engagement, weak feasibility studies and limited understanding of risk-sharing mechanisms. These issues are particularly acute in sectors like renewable energy, transport corridors, and economic zones, where PPPs could deliver high-impact results if better aligned with strategic planning and community needs.

Moreover, the potential of PPPs to contribute to Sustainable Development Goals (SDGs) is not fully realized. Projects often lack integrated social and environmental safeguards, and monitoring frameworks rarely include SDG-linked indicators. As Bangladesh scales its PPP portfolio under Vision 2041, there is a pressing need to embed sustainability, inclusiveness and resilience into PPP design and execution. This requires not only regulatory reform but also adaptive leadership, institutional learning and cross-sector collaboration.

This paper seeks to fill a critical gap by combining comparative analysis with practitioner insights from the BEZA, the Dhaka Bypass Expressway, and the Planning Commission. It offers a grounded perspective on ways PPPs can be

restructured to deliver lasting public value. In doing so, PPPs can mobilize private capital while advancing national priorities and global development goals.

3. Methodology

This paper adopts a mixed-method approach combining document analysis, comparative case studies, and practitioner-level insights.

3.1. Document analysis

Global PPP models were reviewed using secondary literature from multilateral institutions, government reports, and peer-reviewed publications. Particular attention was given to frameworks that align infrastructure delivery with Sustainable Development Goals (SDGs).

3.2. Comparative case studies

Bangladesh's PPP experience was analyzed through national policy documents, project evaluations, and institutional reports from the PPP Authority, Planning Commission, and Infrastructure Investment Facilitation Company (IIFC).

3.3. Practitioner-level insights

The author's direct involvement in the Bangladesh Economic Zones Authority (BEZA), the Dhaka Bypass Expressway, and the Planning Commission informs the practical dimensions of the analysis. These experiences provide firsthand perspectives on implementation challenges and reform opportunities.

3.4. Triangulated approach

By combining policy documents, project evaluations, and field-level experience, this methodology enables both strategic reflection and grounded recommendations tailored to Vision 2041 and the country's evolving development priorities.

4. Bangladesh's PPP journey

4.1. Evolution of PPP in Bangladesh

The evolution of Public-Private Partnerships (PPPs) in Bangladesh has unfolded gradually over the past three decades. Although private sector participation was limited in the early years, initial involvement began in the 1990s, particularly through Independent Power Producer (IPP) projects in the energy sector. These initiatives marked the first significant entry of private actors into infrastructure provision.

Subsequently, a more structured framework emerged in 2004 with the introduction of the Private Sector Infrastructure Guidelines, which aimed to encourage private investment in sectors such as energy, transport, ports, and telecommunications. Institutional development accelerated further in 2010 with the establishment of the PPP Office under the Prime Minister's Office, tasked with coordinating PPP initiatives and strengthening project preparation capacity.

A major milestone followed in 2015 with the enactment of the PPP Act, which provided a comprehensive legal foundation for PPP project development, procurement, and contract management. This framework was further strengthened in subsequent years through several policy instruments, including the Government-to-Government (G2G) Partnership Policy (2017), the Procurement Guidelines for PPP Projects (2018), and the Viability Gap Financing (VGF) Rules (2018). Together, these measures were designed to improve project preparation, enhance procurement transparency, and ensure financial viability.

More recently, Bangladesh has expanded its PPP portfolio across sectors, such as transport infrastructure, energy, ports, and economic zones. However, implementation challenges remain. Key obstacles include delays in land acquisition, financing constraints, and limited technical capacity. Addressing these challenges will be essential for scaling up PPP investment and supporting Bangladesh's long-term infrastructure ambitions under Vision 2041.

4.2. Institutionalization and policy milestones

Bangladesh formally institutionalized PPPs in 2010 with the establishment of the PPP Authority under the Prime Minister's Office and the adoption of the Policy and Strategy for PPP. This marked a turning point in mobilizing private capital and building institutional capacity for infrastructure delivery. The PPP Authority was tasked with developing a project pipeline, standardizing procedures, and coordinating across ministries. As noted in Rahman (2025a), Bangladesh's PPP trajectory reflects strong policy intent but recurring gaps in execution, particularly in project preparation, risk allocation, and private sector confidence. These challenges underscore the need for adaptive governance and strategic reform to realize the full potential of PPPs under Vision 2041.

4.3. Sectoral expansion and early experiments

In 2010, there was an enactment of the Quick Enhancement of Electricity and Energy Supply (Special Provisions) Act, which facilitated the entry of Independent Power Producers (IPPs), a PPP-based model in the energy sector. This initiative rapidly expanded power generation capacity and addressed acute shortages, contributing to SDG 7 (Affordable and Clean Energy). However, it also drew criticism for weak transparency, high tariffs, and governance concerns, ultimately leading to the Act's repeal in 2024. The experience underscored both the potential and pitfalls of PPP-driven reforms, highlighting the importance of robust regulatory oversight and stakeholder engagement.

4.4. Legal and regulatory framework

Bangladesh's PPP ecosystem is governed by a structured set of laws, rules, and policy instruments that shape project development, procurement, and implementation. These can be broadly categorized into two groups:

- (1) Core PPP laws and policies that directly regulate PPP projects, including the PPP Act (2015), Procurement Guidelines (2018), and G2G Partnership Policy (2017); and

- (2) Supporting legal instruments that enable or influence PPP execution across sectors, such as the National Priority Project Rules (2018), Viability Gap Financing Rules (2018), and Technical Assistance Financing Rules (2018).

The key legal and regulatory instruments that shape PPP implementation in Bangladesh, distinguishing between foundational policies and enabling frameworks, collectively provide the scaffolding for PPP expansion. However, gaps remain in enforcement, coordination, and capacity-building, underscoring the importance of the detailed laws and supporting instruments outlined above. Because PPP implementation in Bangladesh is anchored in a wide array of legal and regulatory instruments, it is necessary to examine both the core laws and the supporting frameworks in detail to understand how they collectively enable project development while exposing areas that require reform.

Core PPP Laws and Policies:

- PPP Act, 2015: Establishes the legal foundation for Public-Private Partnerships in Bangladesh. It defines the mandate of the PPP Authority and sets out procedures for project approval, procurement, contract management, and dispute resolution. This framework helps secure legal clarity while promoting institutional accountability.
- Procurement Guidelines for PPP Projects, 2018: Provides detailed procedures tailored to PPP procurement, including prequalification, bid evaluation, and contract negotiation. These guidelines aim to enhance transparency, competitiveness, and value for money in PPP transactions.
- G2G Partnership Policy, 2017: Facilitates bilateral PPP arrangements with foreign governments or their nominated agencies. It enables strategic infrastructure partnerships through direct negotiations, fostering cross-border collaboration and technology transfer.
- National Priority Project Rules, 2018: Provides a framework to fast-track strategic PPP projects that are of national importance. It streamlines approvals, land acquisition, and inter-agency coordination to accelerate implementation of priority infrastructure initiatives aligned with Vision 2041.
- Guidelines for Unsolicited Proposals, 2018: Regulates private-initiated PPPs and their integration into the national PPP pipeline. It outlines procedures for submission, evaluation, and approval to ensure transparency and alignment with national priorities.
- Guidelines for Contractual Employment in PPP Authority, 2018: Establishes the framework for hiring technical experts and support staff within the PPP Authority. It aims to enhance institutional capacity by enabling flexible recruitment of professionals with specialized skills.
- Rules for Public-Private Partnership Technical Assistance Financing, 2018: Provides the regulatory basis for financing feasibility studies, transaction advisory services, and capacity-building initiatives. The rules facilitate early-stage project development and improve the quality of PPP proposals.
- Rules for Viability Gap Financing for Public-Private Partnership Projects, 2018: Defines the criteria and procedures for providing government financial support to PPP projects that are economically justified but not financially viable. The

rules aim to attract private investment in priority sectors while safeguarding public interest.

Supporting Legal Instruments:

- Public Procurement Rules, 2008 (amended 2025): Interfaces with PPP modalities, especially in hybrid or government-supported projects, and ensures procedural alignment with broader public procurement standards.
- Land Acquisition Act, 2017: Governs land acquisition for infrastructure PPPs; delays and disputes under this law often impact project timelines and investor confidence.
- Environmental Conservation Rules, 2023: Mandates sustainability compliance for PPP projects, including environmental impact assessments and pollution control.
- Sector-Specific Guidelines: Provide tailored frameworks for energy, transport, ICT, and other sectors, clarifying technical standards, tariff structures, and risk-sharing mechanisms.
- BIFF Utilization Rules, 2018: Governs the Bangladesh Infrastructure Finance Fund, which supports PPPs through equity, debt, or guarantees.

Together, these instruments provide a comprehensive legal foundation for the PPP implementation in Bangladesh. However, gaps in enforcement, inter-agency coordination, and stakeholder engagement continue to limit their effectiveness. These institutional shortcomings are not merely abstract; they manifest in concrete ways during project execution. The following section draws on field-level experience and practitioner insights to illustrate how these challenges play out in practice and what lessons they offer for reform.

4.5. Project pipeline and implementation trends

As of 2025, Bangladesh has developed a pipeline of over 80 PPP projects with an estimated investment value exceeding USD 30 billion (PPP Authority, 2024). Flagship initiatives include the Dhaka Elevated Expressway, Payra Port development, solar-based Independent Power Producers (IPPs), and the Dhaka Bypass Expressway, Bangladesh's first large-scale transport PPP to reach financial closure. Other notable projects include the Matarbari LNG terminal, Cox's Bazar Airport expansion, and economic zone developments under BEZA, reflecting sectoral diversification and growing ambition.

Despite these achievements, progress remains uneven. Many projects are stalled at the feasibility or tendering stage, and only a few have reached financial closure or operationalization. Delays in land acquisition, limited bankable feasibility studies, and capacity constraints among both public officials and private developers have slowed momentum.

To address these blockages, the government has introduced supportive mechanisms such as:

- Viability Gap Funding (VGF): To bridge financial shortfalls in economically justified but commercially unviable projects
- Standardized Concession Agreements: To reduce negotiation time and improve legal clarity

- Project Development Facilities (PDFs): To fund early-stage studies and transaction advisory services
- G2G Partnership Policy: To facilitate bilateral PPPs with foreign governments and nominated agencies
- National Priority Project Rules: To fast-track strategic PPPs through streamlined approvals and land access

Nevertheless, persistent implementation challenges highlight the need for comprehensive institutional reform, more rigorous project preparation, and improved stakeholder coordination. As shown in **Figure 1**, PPP projects in Bangladesh are predominantly concentrated in the transport sector, followed by energy and port infrastructure.

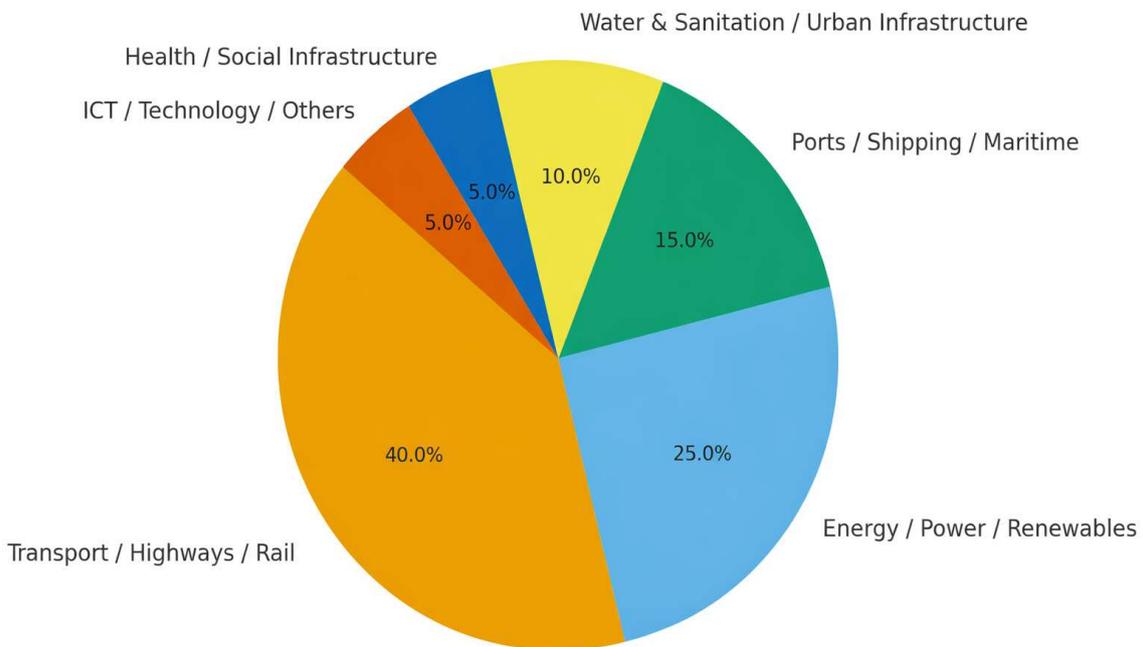


Figure 1. Distribution of PPP projects by sector (transport, energy, ports, health, ICT). Source: Bangladesh PPP Authority project database (accessed 2024).

4.6. Strategic outlook

Bangladesh's PPP journey reflects a blend of ambition and caution. The expanding project pipeline spans transport, energy, ports, and economic zones. It signals strong policy intent and institutional commitment. However, successful delivery will depend on the country's ability to strengthen project appraisal systems, streamline inter-agency coordination, and build sustained private sector confidence.

With Vision 2041 setting ambitious targets for infrastructure-led growth and sustainable development, the challenge lies not in policy formulation but in execution. Translating pipeline projects into operational assets will require a shift from ad hoc implementation to structured, performance-driven delivery. This

includes embedding technical rigor in feasibility studies, ensuring timely land access, and aligning PPPs with national priorities and SDG-linked outcomes.

Equally important is the establishment of robust evaluation and monitoring mechanisms to track project performance, assess value-for-money, and generate feedback for continuous improvement. Without such systems, lessons from implementation risk are lost, and accountability is diluted.

The evolution of Bangladesh’s PPP framework has followed a phased trajectory of policy milestones, institutional reforms, and project experimentation. As shown below, **Figure 2** indicates a significant gap between required and actual public investment in infrastructure, while **Figure 3** illustrates that the evolution of Bangladesh’s PPP framework provides a foundation for scaling PPPs if lessons from past implementation are internalized and reform momentum is sustained.

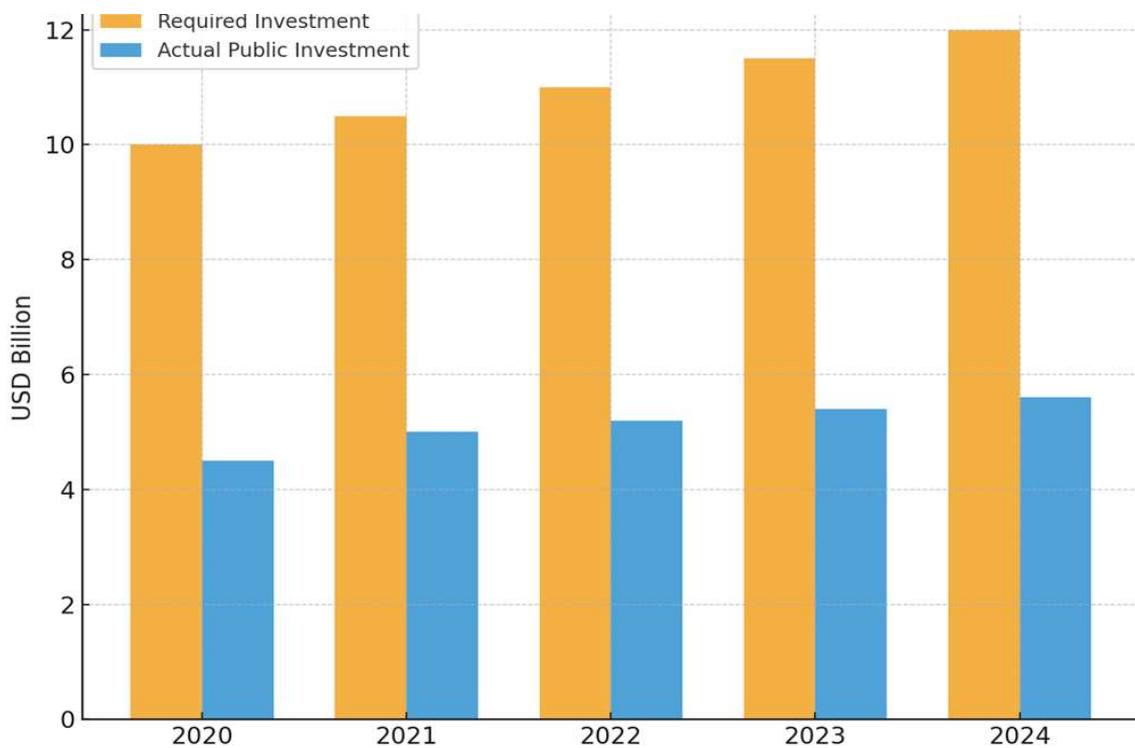


Figure 2. Required vs. actual public investment in infrastructure. Source: Estimates based on World Bank, ADB, and Planning Commission data. Note: “Actual public investment” refers to infrastructure expenditures financed directly through government budgetary resources, primarily under the Annual Development Programme (ADP) and other public sector allocations. It excludes private sector, PPP, and nonprofit financing sources.

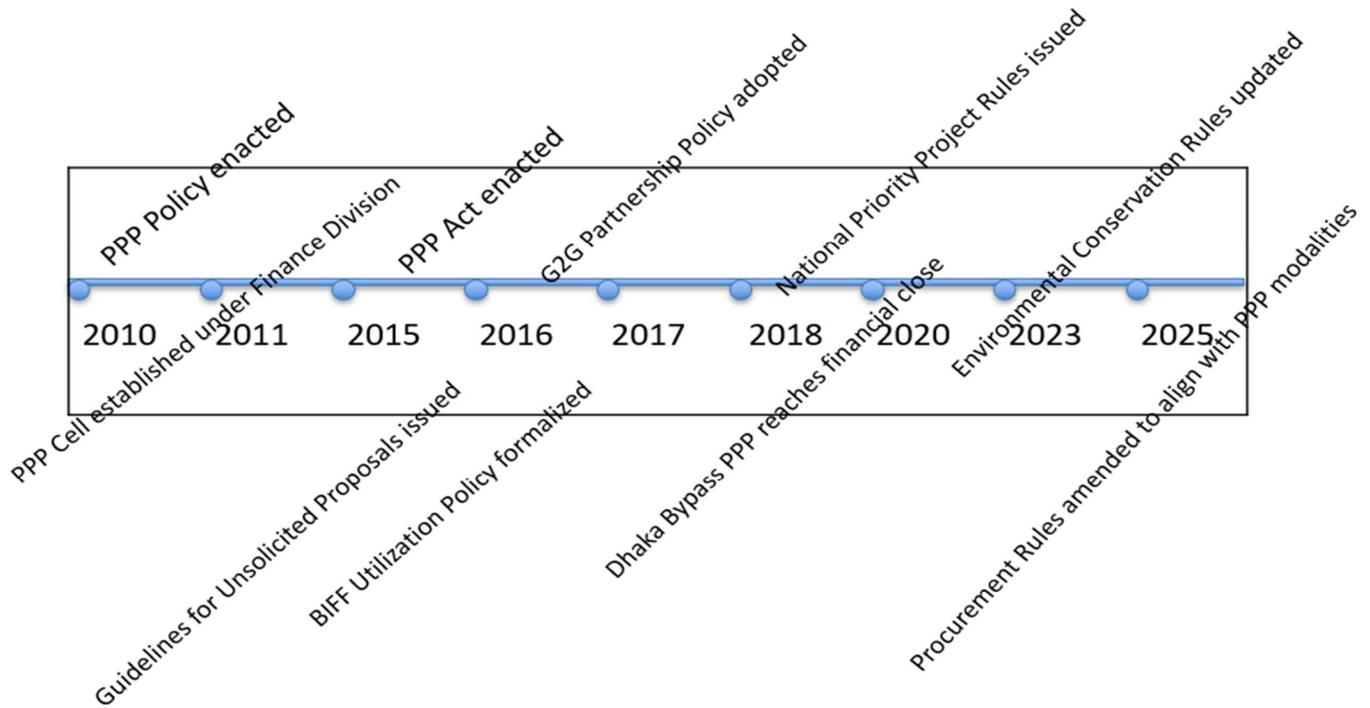


Figure 3. PPP Implementation Timeline in Bangladesh (2010-2025). Key milestones in the evolution of Bangladesh’s PPP framework. Source: Participatory observation and institutional coordination, informed by Bangladesh PPP Authority, Planning Commission, and Ministry of Finance records.

5. Practitioner’s perspective: Field-level experience and institutional insights

5.1. Field-level implementation and policy coordination

At the Bangladesh Economic Zones Authority (BEZA), seven diversified PPP packages were initiated to support industrial ecosystem development, including effluent treatment, desalination, waste management, biogas, solar power, and a master developer initiative. Several projects were discontinued due to inadequate technical expertise, weak financial structuring, and limited investor confidence, underscoring the importance of rigorous feasibility studies and sector-specific know-how.

Field-level engagement in the Dhaka Bypass Expressway further highlighted the governance dimensions of PPPs. Beyond administrative oversight, the responsibilities included supervising construction, coordinating land acquisition and welfare support, ensuring project security, and managing culturally sensitive relocations. These experiences demonstrated that PPP implementation requires not only technical and financial structuring but also local leadership, stakeholder trust, and institutional agility.

In the Planning Commission, participation in inter-agency coordination and policy appraisal has provided strategic insights into project alignment and institutional reform. Collectively, these experiences illustrate the complex governance dynamics of PPP execution, where development goals must be balanced with stakeholder interests and cultural sensitivities.

5.2. Institutional capacity and professional development

Professional development has been central to strengthening PPP expertise. Achieving the Certified PPP Professional (CP3P) credential and participating in national and international training programs have provided exposure to global best practices, innovative financing models, and SDG-aligned infrastructure delivery.

Despite these efforts, awareness of PPPs remains limited among government officials and the wider public. Misperceptions of PPPs as procurement shortcuts often undermine their potential as strategic instruments for long-term value creation. Raising awareness through civil service training, cross-sector dialogue, and dissemination of successful case studies is essential to attract credible investors and build trust.

Together, these experiences highlight the indispensable role of trained civil servants in bridging the gap between policy frameworks and project delivery. They reinforce the need for institutional capacity-building, technical literacy, and adaptive leadership to ensure PPPs deliver sustainable infrastructure and inclusive development.

Lessons Learned

Key Lessons from Field-Level Implementation and Professional Development:

- Bankable design is essential: Projects must be grounded in rigorous technical and financial feasibility. Without sector-specific structuring and credible revenue models, investor interest remains limited even with strong policy backing.
- Local coordination drives success: The Dhaka Bypass Expressway illustrates that PPPs require not only central approval but also proactive field-level leadership, stakeholder engagement, and cultural sensitivity to navigate complex implementation challenges.
- Empowered public servants are key enablers: Technical literacy, adaptive leadership, and decision-making autonomy among public officials are indispensable for managing complex infrastructure partnerships and ensuring accountability.
- Continuous institutional learning is vital: Exposure to global PPP models through training and peer exchange has enabled public servants to adapt international best practices to Bangladesh's context, reinforcing the value of professional development.
- Operational realism must match policy ambition: High-level frameworks alone are insufficient. Effective PPP delivery demands inter-agency coordination, implementation capacity, and responsiveness to ground realities.
- Strategic communication builds legitimacy: Transparent, culturally sensitive communication with local communities, contractors, and political stakeholders is essential to manage expectations, reduce resistance, and build trust.
- Policy continuity ensures investor confidence: Stable governance, predictable incentives, and institutional memory are critical to sustaining private sector engagement and long-term PPP success.

These lessons reinforce the need for a whole-of-government approach to PPPs that integrates strategic planning with frontline execution, builds institutional

resilience from the ground up, and aligns infrastructure delivery with the Sustainable Development Goals (SDGs).

6. Challenges Facing PPP

6.1 Challenges in Bangladesh

Despite notable progress in developing a PPP framework and expanding the project pipeline, Bangladesh continues to face several structural operational challenges that hinder effective implementation.

- **Weak Project Preparation:**

Feasibility studies often lack the technical and financial rigor required to make projects bankable. Incomplete assessments result in limited investor interest and difficulties in reaching financial closure.

- **Imbalanced Risk Allocation:**

PPP contracts frequently transfer disproportionate risks to the public sector or fail to clearly define private sector obligations. This asymmetry undermines bankability and raises concerns about value for money.

- **Land Acquisition Delays:**

Large infrastructure projects are routinely delayed due to disputes, bureaucratic hurdles, and local resistance. These delays inflate costs and erode investor confidence.

- **Underdeveloped Domestic Financing:**

Bangladesh's capital markets remain shallow and ill-equipped to provide long-term infrastructure finance. The absence of instruments such as project bonds and infrastructure funds forces reliance on external financing, exposing projects to currency and exchange rate risks.

- **Limited Institutional Capacity:**

Public agencies and private developers often lack specialized expertise in structuring, negotiating, and managing complex PPP agreements. This capacity gap constrains effective implementation and oversight.

- **Governance and Inclusiveness Gaps:**

Civil society engagement in PPP decision-making is minimal, limiting transparency and public accountability. The management of unsolicited proposals raises concerns about fairness and alignment with national priorities. Conflict resolution mechanisms during implementation are weak, allowing disputes to escalate.

- **Monitoring and evaluation weaknesses:**

Current systems rarely incorporate performance-based indicators or SDG-linked metrics, limiting the ability to assess long-term value creation.

- **Supply Chain Constraints:**

Supply chain bottlenecks are a major constraint for PPP projects in Bangladesh. Infrastructure development relies on the timely delivery of materials and equipment, but delays caused by port congestion, customs procedures, transport issues, and global disruptions often slow construction. Limited coordination among contractors, suppliers, and government agencies further contributes to delays and higher costs. International experience shows that strong supply chain management is essential for

keeping PPP projects bankable, on schedule, and efficient. Therefore, improving this area is increasingly important for Bangladesh.

These challenges frequently lead to delays, cost overruns, reduced investor confidence, and public skepticism about PPPs as a development tool. These bottlenecks highlight the need for systemic reforms that strengthen project preparation, diversify financing instruments, and embed accountability into governance structures. Without addressing these constraints, PPPs risk remaining policy aspirations rather than becoming effective instruments of infrastructure transformation under Vision 2041.

6.2. Global reflections and comparative perspectives

Bangladesh’s PPP challenges mirror those faced by other countries, reinforcing the notion that PPPs are inherently complex and context sensitive.

In Ghana, risks such as corruption, inflation, exchange rate volatility, and project delays have undermined investor confidence. In Hong Kong, despite strong institutions, PPPs encounter land acquisition disputes, cost overruns, and political interference. These cases illustrate that PPP risks vary by context but consistently demand robust governance, transparent procurement, and adaptive risk mitigation.

Globally, PPPs have also sparked debate over their ability to deliver public value. Critics question whether private partners extract disproportionate profits, whether contracts are sufficiently transparent, and whether PPPs truly serve the public interest. These concerns are highly relevant for Bangladesh as it refines its framework. Without addressing these legitimacy issues, PPPs risk eroding public trust and investor engagement. These cross-country insights can be better understood through a comparative view of the major risk factors influencing PPP performance in different contexts, as shown in **Table 1**.

Table 1: Comparative Risk Factors in PPP Projects.

Country/Context	Top Risk Factors Identified	Relevance for Bangladesh
Bangladesh	Weak project preparation; imbalanced risk-sharing; land acquisition delays; limited capital market financing; low institutional capacity; governance issues (civil society exclusion, unsolicited proposals, conflict management).	Core domestic challenges that slow project delivery and undermine investor confidence.
Ghana (Developing economy)	Corruption; inflation and exchange rate fluctuations; delays in project completion; interest rate volatility.	Highlights the importance of transparency, macroeconomic stability, and sound financial structuring to attract investors.
Hong Kong (Developed economy)	Land acquisition delays; operational and construction cost overruns; political interference; project completion delays.	Illustrates that even with strong institutions, PPPs face governance and coordination challenges, especially in urban infrastructure.

Sources: Participatory observation and comparative analysis, drawing on OECD (2018), ADB PPP Guidelines, and Bangladesh PPP Authority documents.

To complement the comparative risk factors outlined above, it is also important to understand how these risks are typically distributed between public and private partners in PPP contracts. **Figure 4** provides an illustrative view of this allocation.

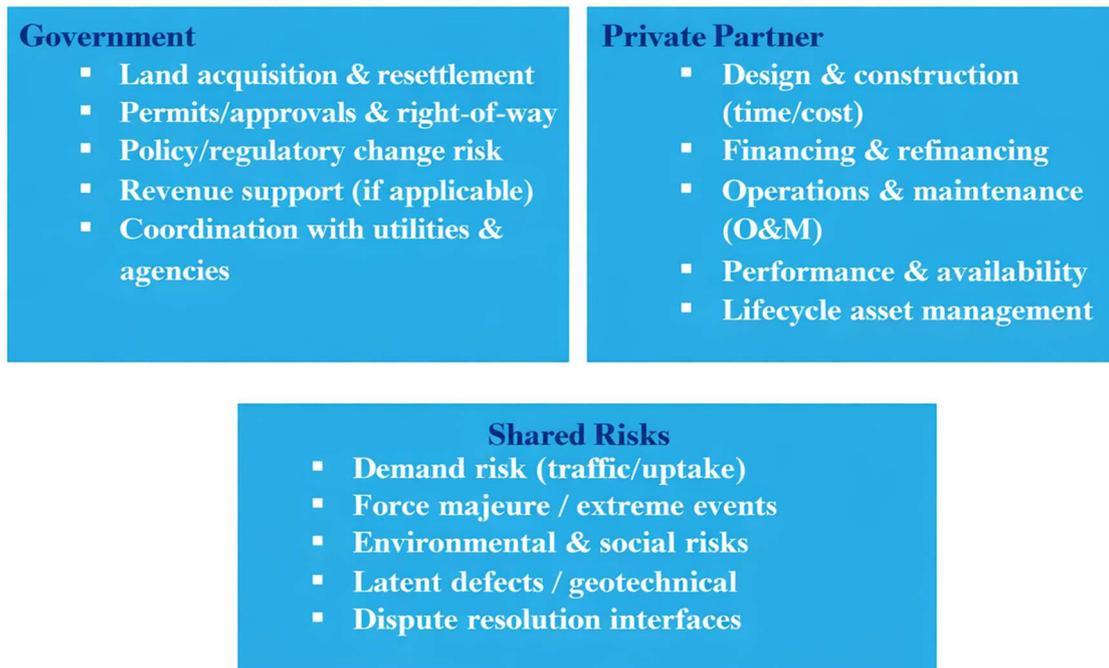


Figure 4. Typical allocation of responsibilities between government and private sector, with shared risks. Source: Participatory observation and comparative analysis, drawing on OECD (2018), ADB PPP Guidelines, and Bangladesh PPP Authority documents.

While risk allocation is central to PPP performance, international experience also shows that broader institutional and policy factors shape project outcomes. **Table 2** highlights key success factors from selected countries.

Table 2. PPP Success Factors in Selected Countries.

Country/Context	Key PPP Strengths / Success Factors	Lessons for Bangladesh
United Kingdom	Pioneered the Private Finance Initiative (PFI); strong legal framework; emphasis on long-term contracts and private financing.	Importance of robust legal structures and transparent contracts to ensure value for money.
Australia	Institutionalized PPP through Partnerships Victoria and Infrastructure Australia; transparent procurement; rigorous feasibility and value-for-money assessment.	Demonstrates the value of centralized PPP units, independent appraisal, and clear guidelines.
India	Introduced Viability Gap Funding (VGF) and Project Development Fund (PDF); strong political support; state-level PPP laws and frameworks.	Shows the role of financial incentives and policy flexibility in scaling PPPs in developing economies.
China	Built one of the largest PPP portfolios globally; strong state-private coordination; massive investment in urban infrastructure, ports, and energy.	Highlights the impact of government commitment and large-scale mobilization of capital.
Vietnam	Clear risk-sharing frameworks; strong FDI attraction; PPPs in power plants, highways, and industrial zones.	Underlines the need for transparent risk allocation and investor-friendly regulatory policies.
United States	Strong focus on transport infrastructure (roads, bridges, airports); establishment of the National Council for Public-Private Partnerships (NCP3P); over USD 50 billion invested in PPP projects since the 1990s.	Emphasizes the role of sector-specific PPP units and demonstrates how large-scale transport PPPs can reduce fiscal burden while modernizing critical infrastructure.

Sources: Osborne (2002), HM Treasury (2012, 2013), ADB (2020)

The preceding analysis reveals that while Bangladesh has laid a strong institutional foundation for PPPs, persistent implementation gaps remain. Addressing these requires a forward-looking reform agenda grounded in both the best global practices and local realities. These reform priorities not only address operational bottlenecks but also align PPP implementation with Bangladesh's broader development goals under Vision 2041 and the Sustainable Development Goals (SDGs), particularly those related to infrastructure, energy, governance, and urban resilience.

7. The way forward

For Bangladesh to realize the full potential of Public–Private Partnerships (PPPs), reforms must move beyond policy aspiration and focus on execution, innovation, and inclusiveness. Drawing on global best practices and domestic experience, the following strategic priorities are recommended to align PPP implementation with Vision 2041 and the Sustainable Development Goals (SDGs):

- **Prioritize Bankable Projects**

The PPP pipeline should emphasize projects with robust demand forecasts, clear revenue models, and strategic national importance. Rigorous project preparation, including technical, financial, and environmental assessments, must be institutionalized. Independent viability evaluations and transparent appraisal mechanisms will enhance investor confidence and reduce the risk of stalled projects. This priority supports Vision 2041's infrastructure targets and SDG 9 (Industry, Innovation, and Infrastructure).

- **Standardize Contracts and Procurement**

Introducing model concession agreements, balanced risk-sharing frameworks, and impartial dispute-resolution mechanisms can reduce transaction costs and improve legal clarity. Standardization will also help public agencies manage complex negotiations and ensure consistency across sectors. Transparent procurement processes anchored in performance-based criteria will strengthen public trust and align with SDG 16 (Peace, Justice, and Strong Institutions).

- **Expand Renewable Energy PPPs**

Bangladesh should accelerate PPPs in floating solar, offshore wind, and waste-to-energy projects. These sectors offer high impact with relatively short gestation periods. Long-term power purchase agreements, blended finance models, and green bonds can attract private investment while supporting SDG 7 (Affordable and Clean Energy) and national climate goals under Vision 2041's green growth agenda.

- **Innovate in Infrastructure Financing**

Traditional bank financing is insufficient to meet Bangladesh's infrastructure needs. The government should develop infrastructure bonds, blended finance instruments, and project development funds to diversify capital sources. Leveraging multilateral development banks for guarantees and co-financing can further de-risk projects. Enabling pension funds and insurance companies to invest in infrastructure will unlock domestic capital markets and reduce reliance on external aid.

- **Strengthen Institutional Capacity**

Specialized training for officials in the PPP Authority, Planning Commission, line ministries, and local government units is essential. Building legal, financial, and technical expertise within public agencies will reduce dependence on external consultants and improve oversight. Institutional memory and knowledge management systems should be developed to retain lessons from past projects. This priority supports Vision 2041's governance reform goals and enhances implementation efficiency.

- **Enhance Awareness and Stakeholder Engagement**

Awareness of the PPP model remains limited not only among citizens but also among many government officials. This gap undermines project coordination, investor engagement, and public legitimacy. Targeted outreach, training, and communication campaigns are essential to build understanding, manage expectations, and foster stakeholder buy-in. Civil society engagement and participatory planning processes should be institutionalized to improve transparency, ensure social inclusiveness, and align infrastructure development with community needs. This supports SDG 11 (Sustainable Cities and Communities) and reinforces public accountability.

- **Support Local Industry and Value Chains**

PPP projects should be designed to promote domestic value additions such as turbine assembly, solar panel manufacturing, and broader supply chain participation. Encouraging joint ventures between foreign investors and Bangladeshi firms can build local capacity and stimulate industrial growth. This approach will generate employment, strengthen national value chains, and ensure broader economic benefits, contributing to SDG 8 (Decent Work and Economic Growth).

- **Enhance Regional Cooperation**

Bangladesh can benefit from structured knowledge exchange with countries such as India, Vietnam, China, and Australia. Regional PPP platforms and cross-border investment partnerships can accelerate capacity building, harmonize standards, and attract foreign capital. This aligns with Vision 2041's ambition for global integration and regional leadership.

- **Leverage the Role of IIFC**

The Infrastructure Investment Facilitation Company (IIFC) plays a pivotal role in project structuring, technical assistance, and investor engagement. Strengthening collaboration between IIFC and the PPP Authority can improve project bankability, streamline due diligence, and enhance institutional coordination, ensuring smoother execution of strategic projects.

- **Institutionalize Civil Society Engagement**

Civil society organizations, including trade unions, consumer groups, professional bodies and NGOs, should be integrated into the PPP lifecycle. Their participation can improve transparency, ensure social inclusiveness, and align infrastructure development with community needs. This supports SDG 11 (Sustainable Cities and Communities) and reinforces public legitimacy and accountability.

To contextualize Bangladesh’s PPP trajectory within broader global patterns, **Figure 5** provides a comparative illustration of PPP investment trends across selected countries.

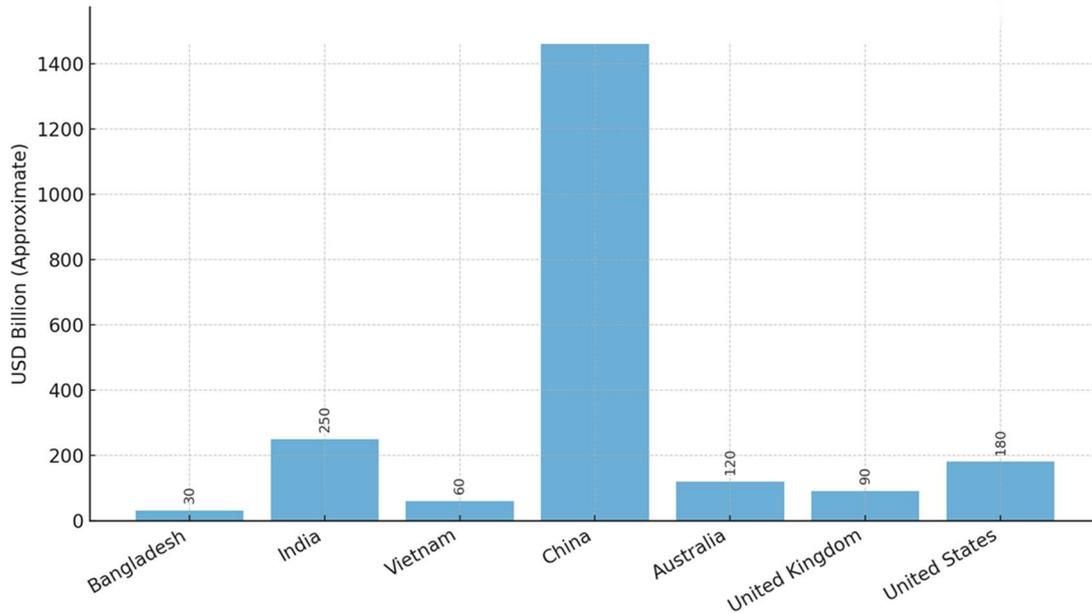


Figure 5. PPP investments in selected countries (illustrative comparison). Source: World Bank Private Participation in Infrastructure (PPI) Database; ADB PPP Monitor; PPP Authority Bangladesh (2024).

In addition to investment trends, understanding the evolution of Bangladesh’s PPP framework is essential. **Figure 6** outlines key policy milestones and institutional developments over time.

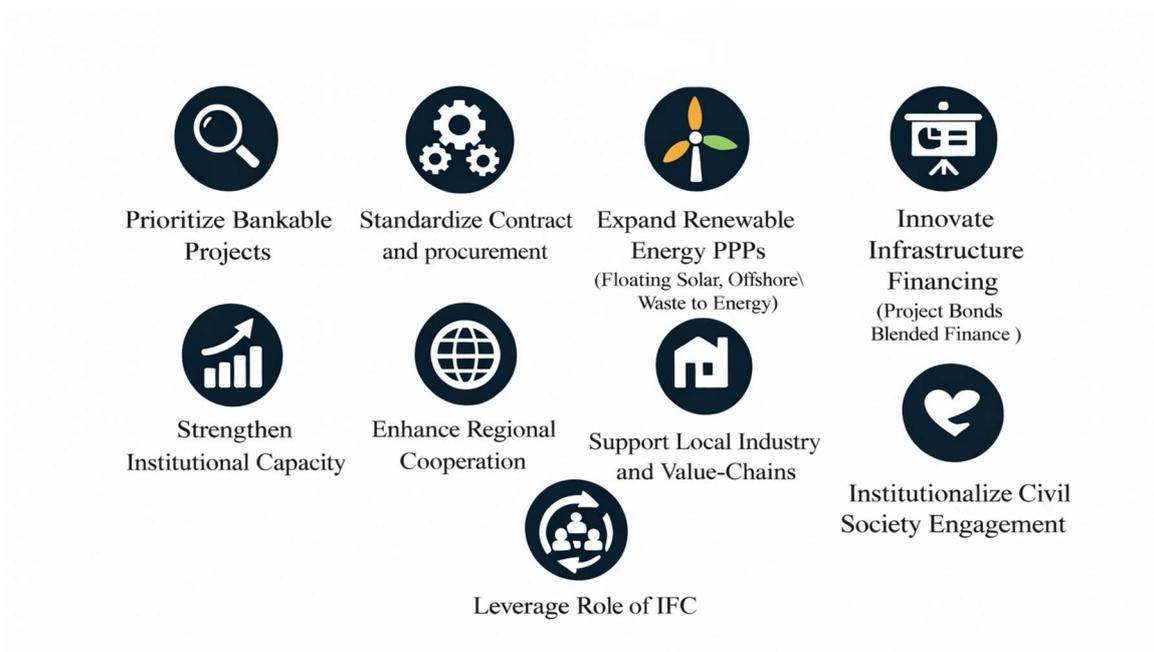


Figure 6. Strategic Priorities for Strengthening PPPs in Bangladesh. Source: Author’s analysis based on PPP Authority Bangladesh, ADB PPP Monitor, World Bank PPI Database, Rahman (2025a, 2025b).

8. Future research and policy implications

8.1 Future research

As Bangladesh deepens its reliance on PPPs to achieve Vision 2041 infrastructure goals, future research should focus on the long-term performance of projects, particularly in terms of service quality, financial sustainability, and public satisfaction. Comparative sectoral studies can reveal patterns in risk allocation, contract design, and stakeholder engagement, offering valuable lessons for adaptive policymaking.

The role of subnational governments and local institutions in PPP delivery also remains underexplored. Examining how decentralization, local capacity, and community engagement influence project outcomes could inform more inclusive and resilient PPP frameworks. In particular, community engagement models that embed social safeguards and participatory approaches into PPP design deserve closer study to ensure projects deliver equitable benefits. Future research could also examine sector-specific PPP performance in Bangladesh, particularly in transport infrastructure, renewable energy, and economic zones.

Looking ahead, several thematic areas merit deeper exploration:

- Climate-resilient PPPs
- Digital infrastructure PPPs
- Comparative policy analysis

Finally, future research should explore how PPP performance can be benchmarked against Sustainable Development Goal (SDG) indicators. This includes assessing contributions to clean energy access, decent employment, resilient infrastructure, and inclusive urban development. Integrating SDG metrics into PPP appraisal and monitoring frameworks will enable policymakers to evaluate not only financial viability but also long-term social and environmental impact. Such alignment will strengthen the legitimacy of PPPs and reinforce their role as instruments of sustainable development.

8.2 Policy implications

Building on the strategic priorities outlined in Section 7, several policy recommendations emerge for strengthening PPP implementation in Bangladesh:

1. Improve project bankability through stronger feasibility studies and project preparation.

High-quality feasibility analysis can enhance investor confidence and reduce implementation risks.

2. Strengthen institutional capacity within government agencies managing PPPs.

Training and technical expertise in project appraisal, contract management, and financial structuring are essential for effective PPP delivery.

3. Enhance transparency and standardization in procurement processes.

Clear procurement guidelines and standardized contracts can improve accountability and reduce transaction costs.

4. Promote innovative financing mechanisms for infrastructure development.

Instruments such as blended finance, infrastructure bonds, and viability gap funding can help mobilize private investment.

5. Integrate sustainability and SDG indicators into PPP project appraisal and monitoring frameworks.

Incorporating environmental and social performance metrics can ensure PPPs contribute to long-term sustainable development.

Together, these policy recommendations provide a foundation for the strategic reforms outlined in the conclusion.

9. Conclusion

Public-Private Partnerships (PPPs) in Bangladesh must evolve from policy aspiration to practical excellence if they are to support Vision 2041. Legal frameworks provide a foundation, but they are not sufficient on their own. Institutions must adapt, capacity must be strengthened, and governance systems must deliver tangible outcomes.

The future of PPPs depends on leadership that can respond to changing conditions, decisions guided by evidence, and active involvement of stakeholders. Reform should be understood as a continuous process, where lessons from implementation feed directly into policy and practice.

PPPs should also be recognized as instruments of sustainable development, not merely as financing mechanisms. Their true value will be measured by how effectively they contribute to clean energy, resilient cities, decent work, and stronger institutions.

If Bangladesh can achieve this transformation, PPPs will not only bridge investment gaps but also shape a development model that is resilient, innovative, and inclusive. In doing so, they will advance both national priorities and the Sustainable Development Goals.

Acknowledgements: The author acknowledges the support of colleagues at the Bangladesh Planning Commission and the Bangladesh Economic Zones Authority (BEZA), whose insights enriched the practitioner reflections in this paper. The author also appreciates the learning opportunities provided through international training programs, which informed the comparative perspectives on infrastructure planning and PPP implementation.

Conflict of Interest: The author declares that there is no conflict of interest.

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