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Introduction - Primer on Project Development Funds

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The PPPRC section on Product Development Funds (PDFs) will be periodically updated to continuously identify lessons learned and success factors that influence the design and operationalization of PDFs. Let us know what you think by taking a Quick Survey.

Introduction

Governments are constrained in their ability to invest sufficiently in infrastructure development. Governments have long been unable to meet infrastructure investment needs due to fiscal constraints that limit public investment. These constraints have been exacerbated by recent economic shocks, including the COVID-19 pandemic, the conflicts in Ukraine and the Middle East, and high inflation. Economic retraction, and fiscal responses to address these shocks, have led to a further increase in sovereign debt. For example, the average total debt burdens among low- and middle-income countries increased by roughly 9 percentage points of gross domestic product (GDP) during the first year of the pandemic, 2019-20, compared with an average increase of 1.9 percentage points over the previous decade.[1] The tightening of global financial conditions over recent years, combined with a long-term slowdown in potential growth, [2] has created significant additional fiscal constraints for governments looking to invest in infrastructure development.

Attracting private investment into infrastructure and basic services is critical to meeting growing demand for infrastructure and to achieving the United Nations Sustainable Development Goals (SDGs). Today, nearly all developing countries have successfully brought an infrastructure public-private partnership (PPP) to market,

and many governments are looking to the private sector to help finance and deliver infrastructure investment. However, achieving the SDGs will require US$2 trillion to US$3 trillion of investment per year through 2030, [3] an unprecedented and unaffordable increase in global public sector funding obligations. According to the World Bank's Private Participation in Infrastructure (PPI) Database, PPI investment in 2022 totaled US$91.7 billion across 263 projects, representing 0.25 percent of the GDP of all low- and middle-income countries. This represents an increase of 23 percent from 2021, and signifies that 2022 commitments are now 4 percent higher than the previous five-year average (2017-2021), demonstrating an impressive recovery following the COVID-19 pandemic.[4] However, even with recent increases, investment levels still fall far short of those required to achieve SDGs.

It is more important than ever that governments invest in quality project preparation if they are to increase private investment in infrastructure. PPPs are key instruments used to enable private investment; however, effectively delivering PPP projects is not straightforward. Early-stage PPP project identification is recommended to consider: strategic suitability, preliminary feasibility, risk assessment, PPP suitability, fiscal affordability, institutional capability, climate change risk exposure, and climate-smart PPP suitability.[5] Full project preparation requires further work, and the successful implementation of PPPs has been directly linked to the appropriate completion of this work, in particular to projects which demonstrate an appropriate risk allocation[6] and economic and social viability,[7] and which are subject to competitive pressure during tendering. [8] Quality project preparation is, therefore, a prerequisite for PPP program growth, which is even more critical in light of the fiscal constraints noted above that are driving strong competition for private capital.

Project Preparation Challenges

PPP project preparation is expensive, and a lack of resources to prepare projects is a key impediment to the success of PPP programs. PPP project preparation is typically more costly than the preparation of conventionally delivered projects. [9] This is often because PPP projects are inherently complex and their preparation requires additional evaluation to determine project viability, including the assessment of project risks and their allocation, value for money (VfM) analysis, and study of requirements for government support and the corresponding fiscal implications of such support.[10] PPP project preparation costs are frequently estimated in the range of 5 percent to 12 percent of total investment costs. [11] However, the high upfront costs associated with PPP project preparation can become a practical barrier to their use, and funds allocated for project preparation in developing countries are significantly lower than in more developed jurisdictions. [12] This barrier can be especially high when governments face tight fiscal constraints, or when decision-makers do not perceive the value of PPPs as sufficient to justify their cost to prepare. [13] The lack of adequate resources to appropriately evaluate and prepare potential PPP projects is a key constraint faced by many PPP programs. [14]

However, a lack of available funding for project preparation is not the only challenge that countries face when developing PPP projects. A number of additional challenges impede adequate PPP project preparation, including:

- **Weak PPP framework.** A weak PPP framework reduces a government's ability to identify, screen, prioritize, and prepare projects. This can create bottlenecks for project preparation.[15] In addition, PPP environment weaknesses disproportionately impact lower-income countries, creating larger gaps in project preparation and longer average lead times to prepare projects.[16]
- **Insufficient capacity.** PPP project preparation is more complex than the preparation of public infrastructure projects, and generally requires a broader range of skills, including technical, economic, social, environmental, and financial expertise. [17] As a result, government practitioners may lack the capacity to properly oversee advisors. This can lead to low-quality advisory support, [18] and consequently, unrealistic project scenarios and delayed or failed projects. [19]

- **Practical budgetary challenges.** Governments are often reluctant to make provisions from centralized or line ministry budgets for structuring PPP projects due to the high perceived cost of professional advisors[20] as well as a preference for allocating funds to capital expenditures. In addition, the length of time that PPP projects take to prepare, [21] which averages three years, creates practical challenges for budgetary support to project preparation, given that many governments operate on an annual budget cycle and cannot allocate the necessary funds under a single budget. Even where an adequate budget is allocated to retain necessary advisors, other challenges may undermine its effectiveness, for example: public procurement rules that focus on lowest cost as opposed to best value, or budget rules that limit expenditures on consultants over certain cost thresholds, can create challenges for the selection of qualified advisors.

Project Preparation Financing

Despite practical challenges, budgetary allocations currently provide the majority of funding to support project preparation. In Sub-Saharan Africa, it is estimated that 70 percent to 80 percent of project preparation funding derives from the government budget cycle.[22] However, the practical budgetary challenges noted above can lead to preparation work of inadequate quality or the preparation of an insufficient number of projects, particularly when exacerbated by the fiscal space constraints facing many developing countries. In some cases, countries have turned to unsolicited proposals (USPs) as a means of filling the preparation gap. However, a review of USP experience does not indicate that they allow public agencies to overcome project preparation capacity constraints, [23] because the processing and award of USPs also requires significant capacity to protect government interests and drive VfM, even where projects are directly negotiated.

Development partners have established a number of facilities that provide project-by-project preparation support, but which are not designed to provide programmatic support across a country's PPP project pipeline. These facilities, as shown in Figure 2, can be global in coverage or may be restricted to certain types of projects, for example those within a geographic area or sector, or projects which address a particular theme. [24] For example, the Global Infrastructure Facility (GIF), housed in the World Bank,[25] is a global platform funded by a range of development partners that supports PPP project preparation with the objective of mobilizing private sector and institutional investor capital[26]. Although these facilities provide support to develop individual projects, they are not able to support all, or even a majority of projects in a given country and are, rather, intended to complement national project preparation. Governments seeking support from these facilities are advised to carefully consider the facilities with which they wish to engage, in order to manage the fit of facility service offerings, sector focus and priorities in a manner which best supports the needs of the government.[27]

Figure 3: Development Partner Project Preparation Facility Coverage

Geographic Focus	Global	Thematic Focus	Geographic and Thematic

- EBRD Infrastructure Project Preparation Facility
- ADB Asia Pacific Project Preparation Facility
- EU PPP Project Preparation Facility for the Southern Neighborhood
- Global Infrastructure Facility
- DevCo
- Clean Technology Fund
- Green Climate Fund Project Preparation Fund
- C40 Cities Finance Facility
- Infraco Africa/Asia (focused on private sector initiated projects)
- AfDB Africa 50 Initiative (commercially operated)

Project development funds (PDFs) are dedicated vehicles which governments establish to systematically support PPP project preparation. They are the subject of this Primer. PDFs can provide a range of PPP project preparation support, and in some instances may also support the preparation of traditionally procured public infrastructure projects. They are often funded from government budget, but may also receive funding from development partners or even the private sector. PDFs, as defined in this Primer, [28] are fully controlled by the government, which, therefore, also has full control over project selection and funding allocation. [29] This allows PDFs to support overall government policy towards the development of PPPs, and systematically address specific project preparation challenges within a country. Their establishment is often seen as a signal of political commitment to PPP programs. However, PDFs require deliberate design and management to be successful, and a wide range of issues, from legal status and governance to sustainability, need to be considered prior to their implementation.[30]

Finally, governments also utilize other systematic mechanisms to support project preparation. These mechanisms are not the focus of this Primer; however, their similarity to PDFs in some circumstances enables them both to inform, and to benefit from, lessons for PDFs. These mechanisms include:

- Ring-fenced budget support. In some jurisdictions, budget funds can be ring-fenced to support specific objectives. For example, Chile[31] earmarks budget allocations for project preparation. Although this approach helps to ensure availability of funds, it may not resolve practical budgetary challenges. Where such allocations are subject to detailed guidance on project eligibility and fund usage, these mechanisms may resemble PDFs.
- Local DFI project preparation support. Where established, local DFIs often have the mandate to support project preparation, frequently in order to ensure a pipeline of bankable projects. This improves access to project preparation resources for projects which are of interest to local DFIs. But this can create conflict of interest issues, given the typical role of a DFI in financing the projects that are ultimately supported. Where decisions related to project selection and support level are both government-controlled and disassociated from any financing considerations, preparation facilities within local DFIs may resemble PDFs.

Approach and Methodology

This Primer seeks to assist public sector and other PPP practitioners who are considering PDF implementation. It aims to paint a clear picture of how and why PDFs can support the development of PPP programs to support policy makers in understanding whether a PDF can help to address their particular PPP

program challenges. Where practitioners are developing a PDF, this Primer provides detailed information on PDF design features to assist practitioners in establishing a PDF that will deliver on its objectives.

This Primer focuses on understanding how and why PDFs are established, and how best to enable them to contribute to the success of PPP programs. It reviews the experience of a number of PDFs to identify lessons learned and success factors that influence their design and operationalization. Initial research was conducted to identify candidate PDFs, which are listed in the Annex. From this list, seven PDFs were selected for further research, as shown in the table below. Factors influencing the selection of these PDFs included the availability of information and the desire to reflect different regional experience. Although these seven PDFs are all national in scope, findings in this Primer are expected to be generally applicable to all PDFs, including those that have a sub-national focus.

Figure 4: PDFs Selected for Review

Country	Region	Economy Classification	PDF Name	Year Established	Location	Description
Ghana	Africa	Lower-Middle Income	Project Development Facility (PDF)	2020	PPP Unit (MoF)	PPP-specific PDF
India	South Asia	Lower-Middle Income	Infrastructure Project Development Fund (IIPDF)	2007	PPP Cell/Private Investment Unit (MoF)	PPP-specific PDF
Indonesia	East Asia and Pacific	Lower-Middle Income	Project Development Facility (PDF)	2015	PPP Unit (MoF)	PPP-specific PDF
Kenya	Africa	Lower-Middle Income	Project Development Fund Window (PDF Window)	2022	PPP Unit (MoF)	PDF Window within the PPP Project Facilitation Fund (PFF)
Mexico	Latin American and Caribbean	Upper-Middle Income	FONADIN (National Infrastructure Fund)	2008	National Development Bank for Public Works and Services (BANOBRAS)	Infrastructure development PDF
Philippines	East Asia and Pacific	Lower-Middle Income	Project Development and Monitoring Fund (PDMF)	2010	PPP Center (NEDA)	PPP-specific PDF
South Africa	Africa	Upper-Middle Income	Project Development Fund (PDF)[32]	2004	PPP Unit (National Treasury/ GTAC)	PPP-specific PDF

This Primer is based on publicly available information on the selected PDFs and associated PPP programs, as well as development partner documentation and interviews with both development partner and government PDF staff. However, there are few PDFs that provide extensive detail on PDF operations or regular reporting on PDF outcomes. As a result, the extent of data available for review varies considerably across the PDFs. This Primer does not, therefore, include detailed case studies of the individual PDFs, but rather presents the lessons drawn from available information, providing relevant examples to illustrate findings. In addition,

although research efforts were focused on the seven PDFs identified above, publicly available information on other PDFs has also been incorporated where relevant in order to reflect the widest range of PDF experience possible.

The study of specific PDFs is supplemented by a review of relevant published studies. [33] There are few studies which include a specific focus on PDFs. Those identified include the Global Infrastructure Hub (GIH)'s Leading Practices in Governmental Processes Facilitating Infrastructure Project Preparation, which discusses lessons for supporting infrastructure project preparation and has a specific section on PDFs. Other than this, only country-specific publications are available, such as the Asian Development Bank (ADB)'s A Project Development Fund for Mongolia's PPPs, which provides a theoretical framework for the development of a PDF in Mongolia. Findings from these studies are cited throughout the Primer, along with lessons which are relevant from other studies on project preparation funds and facilities. A comprehensive list of literature reviewed is included at the end of this document in the Reference section.

Programmatic project preparation financing provided through specific development partner operations is also considered as a source of relevant lessons for PDFs. Where intentionally designed to align with a country's legal and institutional PPP framework, programmatic project preparation financing by development partners can provide PPP program support similar to that provided by PDFs. These operations have often been implemented to support sustainable, good-practice PPP project preparation. The lessons learned from the design and implementation of these operations are often highly relevant for PDFs. Development partner-financed programmatic project preparation reviewed for this Primer includes World Bank operations in Afghanistan, Ghana, Indonesia, Kenya, and Nigeria, and an Asian Development Bank (ADB) operation in Viet Nam.

Structure

This Primer is organized as follows:

Introduction - this introduction, which defines PDFs and the types of experience and information on which this Primer is based.

PDF Motivations and Experience - explores why governments implement PDFs, when in the development of their PPP program they tend to be implemented, and how successful PDFs have contributed to overall PPP program performance.

PDF Design - key elements of PDF design.

- **PDF Structure** - explores PDF legal structures and how PDFs are governed and administered.
- **PDF Funding** - covers PDF funding sources, funding requirements, and whether they can or should be sustainable.
- **PDF Project Selection** - discusses the scope of projects PDFs support, project readiness, eligibility criteria, and project implementation arrangements.

Operational Considerations - covers key operational issues for PDFs, including generating demand for PDF services, advisor procurement, and staffing.

Lessons for Practitioners - captures key overarching lessons from across the Primer as well as thoughts on how PDFs contribute to PPP program development.

Footnote 1: WBG (World Bank Group). 2022. World Development Report.

Footnote 2: WBG. 2023. Global Economic Prospects.

Footnote 3: UN (United Nations). 2016. United Nations Conference on Trade and Development's World Investment Report.

Footnote 4: WBG. 2022. Private Participation in Infrastructure (PPI) Annual Report.

Footnote 5: These parameters are based on the World Bank's Project Screening and Analytics Tool (PSAT). The PSAT tool can be found here.

Footnote 6: Li Bing, A. Akintoye, P. J. Edwards, and C. Hardcastle. 2005. "Critical Success Factors for PPP/PFI Projects in the UK Construction Industry." Construction Management and Economics Journal; Osei-Kyei, R., and A. P. C. Chan. 2015. "Review of Studies on the Critical Success Factors for Public–Private Partnership (PPP) Projects from 1990 to 2013." International Journal of Project Management.

Footnote 7: Cui, C., Y. Liu, A. Hope and J. Wang. 2018. Review of studies on the public-private partnerships (PPP) for infrastructure projects.

Footnote 8: Yehoue, E. 2013. Institutional setting, macroeconomic stability and public-private partnerships.

Footnote 9: ADB (Asian Development Bank). 2016. A Project Development Fund for Mongolia's Public-Private Partnerships.

Footnote 10: GIH (Global Infrastructure Hub). 2019. Leading Practices in Governmental Processes Facilitating Infrastructure Project Preparation.

Footnote 11: GIH. 2019. Leading Practices in Governmental Processes Facilitating Infrastructure Project Preparation.

Footnote 12: G20 Working Group. 2014. Assessment of the Effectiveness of Project Preparation Facilities in Asia.

Footnote 13: ADB. 2016. A Project Development Fund for Mongolia's Public-Private Partnerships.

Footnote 14: WBG. 2021. "Issues Paper: Identifying Critical Factors for Success and Challenges of Implementing a PPP Program." (Unpublished.)

Footnote 15: WEF (World Economic Forum). 2015. A Principled Approach to Infrastructure Project Preparation Facilities.

Footnote 16: WBG. 2018. Procuring Infrastructure PPPs.

Footnote 17: GIH. 2019. Leading Practices in Governmental Processes Facilitating Infrastructure Project Preparation.

Footnote 18: ADB. 2016. A Project Development Fund for Mongolia's Public-Private Partnerships.

Footnote 19: Leigland, J. , and A. Roberts. 2007. The African Project Preparation Gap. PPIAF Gridlines/World Bank Group.

Footnote 20: ADB. 2012. PPP Operational Plan 2012-2020.

Footnote 21: Fioravanti, R., C. Lembo, and A. Depp. 2019. The Role of Project Preparation Facilities: An Overview of MDBs and the Inter- American Development Bank Approach. IADB.

Footnote 22: GIH. 2019. Leading Practices in Governmental Processes Facilitating Infrastructure Project Preparation.

Footnote 23: WBG. 2018. Policy Guidelines for Managing Unsolicited Proposals in Infrastructure Projects.

Footnote 24: GIH. 2019. Leading Practices in Governmental Processes Facilitating Infrastructure Project Preparation.

Footnote 25: WBG. 2023. “Financial Intermediary Funds: Global Infrastructure Facility.”

Footnote 26: GIF provides support to define and prepare PPP projects, both on a standalone basis and potentially through government PDFs.

Footnote 27: GIH. 2019. Leading Practices in Governmental Processes Facilitating Infrastructure Project Preparation.

Footnote 28: The terminology used to describe funds which support project preparation (project development fund, project preparation fund, project preparation facility, project facilitation fund, etc.) vary and are often used differently in different publications. They are also sometimes used interchangeably. The definitions used herein have been developed to establish a common language for the purposes of discussion within the Primer.

Footnote 29: Development partners, including the World Bank, have also financed country-specific programmatic project preparation directly through specific lending operations. Like PDFs, these operations can support a wide range of PPP projects and project preparation activities in a specific country, and provide comprehensive support to a national PPP program. Unlike PDFs, however, these mechanisms are generally time limited; subject to a range of development partner requirements; and do not require the establishment of a legal or governance structure.

Footnote 30: ADB. 2012. PPP Operational Plan 2012-2020.

Footnote 31: GIH. 2019. Leading Practices in Governmental Processes Facilitating Infrastructure Project Preparation.

Footnote 32: South Africa’s PDF was envisaged to provide support over a 10 year period, and is no longer active.

Footnote 33: See a full list of references in the Reference list at the end of the document.

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