

# PUBLIC-PRIVATE PARTNERSHIPS IN LAND ADMINISTRATION

Analytical and Operational Frameworks



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- The Public-Private Infrastructure Advisory Facility (PPIAF), a multi-donor trust fund housed in the World Bank, which provides technical assistance to governments in developing countries. Its main goal is to create enabling environments through high-impact partnerships that facilitate private investment in infrastructure. For more information, visit [www.ppiaf.org](http://www.ppiaf.org)

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# ABBREVIATIONS

BOO	Build-Own-Operate
BOOT	Build-Own-Operate-Transfer
BOT	Build-Operate-Transfer
BTO	Build-Transfer-Operate
CAPEX	Capital Expenditure
CBA	Cost Benefit Analysis
CoFLAS	Costing and Financing Land Administration Services
CVA	Concept Viability Analysis
DBFO	Design-Build-Finance-Operate
DBFOM	Design-Build-Finance-Operate-Maintain
DBFOT	Design-Build-Finance-Operate-Transfer (Construction)
DCMF	Design-Construct-Manage-Finance
EBRD	European Bank for Reconstruction and Development
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
IDB	Inter-American Development Bank
LA	Land Administration
LAS	Land Administration System
LDO	Lease-Develop-Operate
LGAF	Land Governance Assessment Framework
LIC	Low-Income Country
LIS	Land Information System
MCC	Millennium Challenge Corporation
MFD	Maximizing Finance for Development
MIC	Middle-Income Country
NPV	Net Present Value
NSW	New South Wales
O&M	Operations and Maintenance
OPEX	Operational Expenditure
PFI	Private Finance Initiative
PPP	Public-Private Partnerships
PSC	Public Sector Comparator
PSP	Private Sector Participation
RA	Readiness Assessment
RBA	Results-Based Aid
RBF	Results-Based Financing
ROI	Return on Investment
ROT	Rehabilitate-Operate-Transfer
SDG	Sustainable Development Goals
SPV	Special Purpose Vehicle
USP	Unsolicited Proposal
VfM	Value-for-Money
WBG	World Bank Group

*All dollar amounts are U.S. dollars unless otherwise indicated.*

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# EXECUTIVE SUMMARY

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of PPPs in Land Administration

## Introduction

Land administration<sup>1</sup> is critical to economic growth and sustainable development. Secure property rights and effective land administration systems are the cornerstone of any modern economy. They give confidence to individuals and businesses to: (a) invest in land, (b) allow private companies to borrow, using land as collateral, and (c) enable governments to collect land-based taxes and fees, which are necessary to finance the provision of infrastructure and services to citizens. An effective and efficient land administration system also supports the development of infrastructure projects, by clarifying land ownership, supporting project planning, and mitigating delays and disputes, among other benefits. Investing in land administration, therefore, can improve the delivery of land-related services and unlock land both as a factor of production and as an input in infrastructure value chains. The centrality of land administration is further heightened when considering that a majority of the world's population does not have legally registered rights to their land and homes, making affordable and accessible land administration services instrumental to ending poverty, fostering inclusive growth, and enabling broader socioeconomic stability.

Despite the importance of land administration in the economy, traditional public sector procurement has generally been weak and takes longer to implement than planned, particularly in projects encompassing first registration and/or the development of land information systems. Given that some land administration services, such as registration, have certain public goods aspects,<sup>2</sup> they may be better suited to public sector provisioning. However, other land administration services, such as field surveys, land information system development, e-services, and others, can benefit from private sector participation to introduce efficiencies and reduce costs of service delivery. As a result, public-private partnerships<sup>3</sup> (PPPs) have generated significant interest as a way of modernizing land administration systems while avoiding some of the pitfalls of traditional procurement methods and supporting the ultimate goal of improving land administration systems and services. The PPP modality has been implemented in several high-income countries, though previous examples of PPPs in land administration in low- and middle-income countries have been limited. This growing interest in land administration PPPs in these countries is a result of both government-led scoping initiatives and unsolicited proposals made by the private sector. In this context, the World Bank found that there was neither a common understanding of what constitutes successful land PPPs nor a systematic approach to help scope and consider this option.

This report *Public-Private Partnerships in Land Administration: Analytical and Operational Frameworks* was developed to address these knowledge gaps, advance the thinking on how PPPs can be implemented in land administration with appropriate risk mitigation, and explore how the World Bank and other development partners may engage in financing and building capacity in land administration. With its analytical assessments and operational tools, the report intends to support governments (land agencies and government entities tasked with overseeing PPPs) and development partners in better understanding and identifying potential opportunities for PPPs in land administration.

<sup>1</sup>Land administration can be defined as the process of determining, documenting, and disseminating information about ownership, value, and use of land.

<sup>2</sup>Deininger, Klaus. 2003, "Land Policies for Growth and Poverty Reduction." World Bank and Oxford University Press.

<sup>3</sup>The World Bank PPP Knowledge Lab defines a PPP as: "a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance". Source: <http://www.pppknowledge.org>.

## Why Consider PPPs in Land Administration?

Land administration PPPs are not traditional infrastructure PPPs, which often focus on physical infrastructure (such as roads or bridges). Land PPPs, due to the nature of the services provided by such projects, can be considered unique and categorized separately from more common physical infrastructure PPPs. While technology-centric land PPPs that deal with digitization and/or land information system development can be considered close to e-Government PPPs, there are other project concepts that demand special attention. For example, first registration could be considered as a project concept because in many low- and middle-income countries traditional public procurement has typically taken longer than planned and fallen short during implementation. Therefore, there is significant room to explore land PPP project concepts depending on the specific needs and objectives of a country or sub-national jurisdiction.

While the spectrum of opportunities for different land PPP project concepts is broad, some of the potential benefits of PPPs can be anticipated based on the application of PPPs in delivering physical infrastructure projects. The key advantages of the PPP approach over traditional procurement methods for governments can be broken into three broad categories: financial, management, and technology. The specific benefits include, but are not limited to, the following:

### Financial

- Enabling the injection of private investment and capital into projects
- Obtaining Value for Money (VfM) through the efficient allocation of risk to the party best able to manage it
- Delivering the PPP project (asset or service) without burdening the treasury and credit rating
- Freeing up the limited public funds for allocation to other activities/sectors where private provision is not possible
- Capping costs over the PPP project life cycle, providing certainty for government planning and budgeting while holding the private party accountable and delivering the PPP project in a pre-defined timeframe

### Management

- Capturing efficiencies and management expertise from the private sector
- Supplementing public sector skills and capacity for effective service delivery
- Enhancing the ability to recruit and retain highly skilled staff to support service delivery

### Technology

- Harnessing innovations and new technologies from the private sector
- Securing technology refreshes through the PPP agreement (contract)

More broadly, the successful development and implementation of PPPs in a sector as fundamental as land administration would signal to the market the capacity of government in contract development and management as well as demonstrate transparency and accountability. These market signals could support broader private capital mobilization and investments.



## Objectives and Structure of the Report

The realization of the PPP benefits described above is dependent on the specific context and nature of the project in question, which must be appropriately assessed and developed in line with the different stages of the PPP Project Life Cycle. Specifically, a project must be appropriately identified, selected, screened, prepared, appraised, structured, and procured (see ES Figure 1 with the PPP Life Cycle) to ensure the project's likelihood of success during implementation.

This report specifically focuses on the identification stage of the PPP Life Cycle. After presenting the key analytical concepts behind land administration PPPs, it provides actionable guidance through **early-stage rapid assessment tools** for project identification and screening that flow into the initial stages of the PPP Life Cycle. The operational tools have been consciously designed for practical use by governments and development partners, and can be used in the field to achieve the following:

1. Assess the readiness of the jurisdiction of focus (either national or subnational) through both land administration and PPP lenses
2. Develop initial land administration PPP project concepts
3. Undertake early-stage concept viability analyses and validate project concepts for further appraisal
4. Identify potential reform areas, as applicable, to enable the successful implementation of a land administration PPP

The report has benefited from three rounds of global consultations,<sup>4</sup> during which it received input and feedback from over 100 participants from governments, the private sector, development partners, and academia. Furthermore, the operational tools were tested to varying degrees and refined through pilot applications in three countries between May 2019 and April 2020. This current report can be considered a "Version 1.0," which can be updated over the years based on additional experience and lessons learned.

While it was not initially designed to support governments in responding to unsolicited proposals for land administration PPPs, the report's tools can also be used to increase government capacity and development partners' comfort in looking at unsolicited proposals, which have been increasing in frequency in recent years. The tools enable a degree of balancing the scales in what can often be an asymmetrical negotiation process for governments.

One key advantage of the report's tools is that by applying them, governments can also ensure project concepts proceeding to the more resource-heavy appraisal stages demonstrate underlying viability, avoiding the dedication of resources and funds to projects with a low likelihood of success. The importance of such scrutiny is amplified at present, as governments face fiscal constraints and competing budgetary priorities during the COVID-19 response and recovery periods.

While the report pays considerable attention to operational aspects, it was designed with the understanding that no operational tool can be effective without strong analytical underpinnings, a discussion of risks, and due regard with the governance aspects of the PPP implementation stage. As a result, the report is structured into four parts:

<sup>4</sup>These consultations took place in Dubai (October 2018), Kuala Lumpur (February 2019), and Vienna (May 2019).

- Part I: Analytical Framework
- Part II. Operational Framework
- Part III: Risk Reference Matrix
- Part IV: Governance Guidance Matrix

These four parts of the report are synthesized below.

### **Part I: Analytical Framework**

The Analytical Framework provides the technical and theoretical basis of the Operational Framework's tools for early-stage land PPP project concept identification and assessment. The Analytical Framework explores several core foundational elements, including the following:

**Land PPP Entry Points:** Land administration covers a broad range of services, including the recording and registration of rights in land, the recording and registration of grants or transfers of those rights, and other such functions. Within this suite of land services, the Analytical Framework has identified certain entry points along land administration service delivery value chains, based on the suitability of providing such services through the PPP modality. Specifically, entry points within the following value chains were identified:

- Management and Operations (for example, establishing IT infrastructure and systems and providing technological upgrades)
- Land Register (for example, developing and maintaining an e-Conveyancing solution)
- Spatial Data Infrastructure (for example, designing and developing a cadastral data management system)
- Valuation and Taxation<sup>5</sup> (for example, developing a mass appraisal system)

**Land PPP Case Studies:** One of the first major concessions of this kind came into being in Ontario, Canada, in 1991. This concession encompassed digitization and the operation of an electronic land registry system. The total number of land PPP projects since this point, however, is limited to some degree. To identify lessons learned from this relatively small pool of past experience, the Analytical Framework draws from case studies of previous land PPP projects, including the Land Titling Computerization Project in the Philippines; the Bhoomi Project in Karnataka, India; e-Land (e-Tanah) in Kuala Lumpur, Malaysia; and the Land and Property Information Concession in New South Wales (NSW), Australia. These case studies identified several key lessons learned, including the importance of project preparation through vigorous appraisal and structuring, the necessity of certain functions being retained by government partners (such as setting policy), the need to clearly and explicitly designate ownership and other use rights related to data, and the significant potential for subnational PPPs.

**Financing Land PPPs:** To be able to successfully consider and develop a land PPP, practitioners must have a clear understanding of the financial aspects of the project. To support this understanding, the Analytical Framework provides an overarching assessment of common capital expenditures (CAPEX), which include the costs of the IT solution, IT refreshes, data conversion, vehicles, furniture, and equipment, and operating expenditures (OPEX), which include the costs of staffing, capacity building, IT solution maintenance, and consumables. While the examples listed above would often fall under the private sector (depending on the specific nature of the PPP contract), government costs are also explored, including those related to project management, monitoring and evaluation, communications, maintaining the legal framework, dispute resolution, and first registration costs (if applicable under the

<sup>5</sup>Even though Valuation and Taxation entry points fall under property taxation, they are listed here under Land PPP Entry Points due to the linkages between land administration and property taxation.

PPP contract). Guidance on determining these costs, as well as estimating the potential revenue for service provision (including new value-added services), is provided, with reference to existing tools such as Costing and Financing Land Administration (CoFLAS).

The user-pays, government-pays, and hybrid payment mechanisms introduced under the PPP and results-based financing (RBF) section are further elaborated upon under this analysis, with an assessment of the potential application of subsidies, including one-off subsidies for first registration, traditional tariff subsidies to bridge the gap between commercially viable user fees and the public's willingness to pay (for example, for transfer fees), and ongoing subsidies to support continuous gaps between cost recovery and affordability for users. Blended finance mechanisms can also be considered to address viability gaps for PPP projects. Within these projects, targeted subsidies and RBF approaches could be used to provide land administration services down market to make them more accessible to poor and vulnerable populations.

**Minimum Requirements:** The final component of the Analytical Framework addresses the common issues which may fall outside the purview of PPP preparation in other sectors, such as the capacity of land agencies, pro-poor considerations, and hidden costs (such as administration costs, transaction costs, procurement costs, and misaligned incentive costs). The Analytical Framework's analysis culminates in the examination of illustrative minimum requirements for land PPPs, which include:

- **Legal, Regulatory, and Institutional:** Is the project legally permissible and regulated appropriately with corresponding institutional capacity?
- **Project Life Cycle:** Can the project be properly identified, appraised, structured, procured, implemented, and overseen by the appropriate government entities to heighten the project's likelihood of success?
- **Public and Private Roles and Responsibilities:** Are the parties involved capable and willing to prepare and implement the project?

Finally, the report assesses potential intervention strategies to address common gaps facing low- and middle-income countries that are considering land PPP projects. This includes addressing limited financing, lack of resources for project appraisal and preparation, uncertain political support, and liability.

The findings of the Analytical Framework inform the foundation for the Operational Framework, which is described below.

## **Part II: Operational Framework**

The Operational Framework consists of three operational tools:

**The Readiness Assessment (RA) Tool:** This tool includes two components: the PPP RA and the Land Administration (LA) RA. This tool allows for a rapid diagnostic of a country or jurisdiction's readiness for a land PPP. The scorecards and tool have been specifically created to allow for rapid identification of next steps and/or key impediments to readiness to inform reform roadmaps in land and/or PPP spheres.

**The Land PPP Conceptualization Tool:** This tool provides a framework for the development of a new land PPP project concept or the validation of an existing project concept. The tool is structured to compile the information required to move forward with the Concept Viability Analysis.

**The Concept Viability Analysis (CVA):** The CVA allows users to assess the preliminary viability of a land PPP project concept through five cases, including the Strategic Case, the Economic Case, the Management Case, the Financial Case, and the Commercial Case. Users can then consider moving to the subsequent stages of the PPP Life Cycle for projects demonstrating preliminary viability.

The use of these tools and how the results feed into the PPP Project Life Cycle is demonstrated in ES Figure 1. These tools are designed for use by governments (land agencies, PPP units, and other such institutions) and development partners interested in exploring land administration PPPs. The Operational Framework, through its annexes, also provides detailed guidance and support to explain the application of the operational tools and how they can be used in the field for rapid early-stage project identification and preliminary screening.

### **Part III: Risk Reference Matrix**

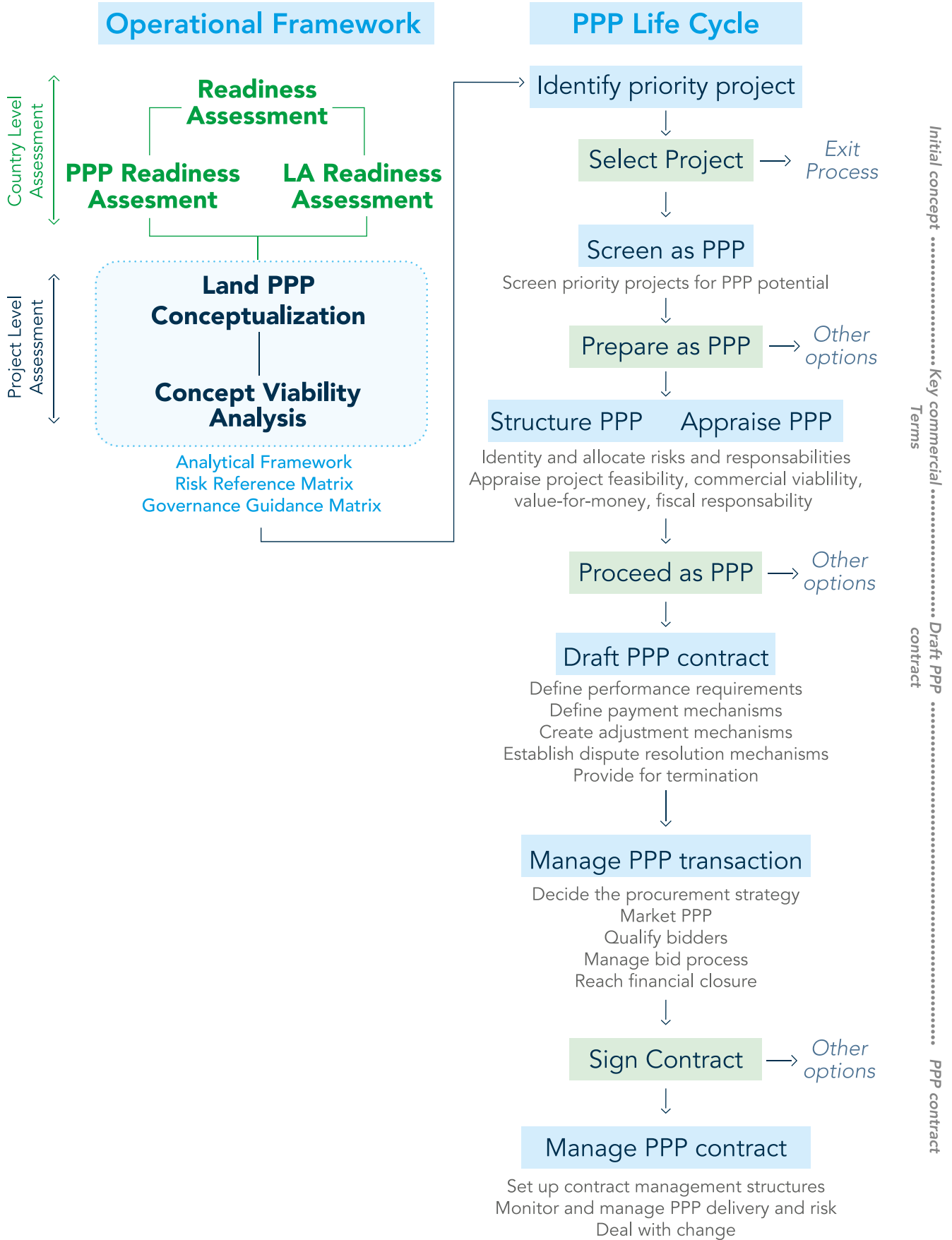
The Risk Reference Matrix identifies common risks for governments, private sector partners, and citizens in the context of designing and implementing a potential PPP in land administration. It is important to note that this is not a comprehensive list of risks as each project must be examined within its specific context. At the same time, the Risk Reference Matrix provides a foundation from which users can consider risks to improve the quality of discussions around a potential land PPP.

This illustrative compilation of risks also provides guidance on the primary parties affected, the impact or consequences of the risk, and potential mitigation considerations. The risks covered are categorized as follows:

1. Political and Governance: weak governance (including, corruption and elite capture), strong resistance to change, political support, and political instability
2. Macroeconomic and Fiscal: fiscal risk and contingent liabilities, financial crises during project implementation, and limited country infrastructure
3. Legal and Institutional: weak legal framework, changes in law during project implementation, unclear delineation of roles and responsibilities between government entities, and lack of institutional experience with PPPs
4. Financial and Commercial: lack of investor interest and unclear revenue forecasts
5. Contractual and Technical: protection of intellectual property, comprised government access and control of data, data privacy, accessibility and affordability of services, scope creep, and limited demand for services due to lack of public awareness of the value of registration
6. Social: the marginalization of vulnerable groups through the costs of service provision and the negative impacts of first registration design on those whose rights are not registered

PPPs offer the advantage that a particular risk can be allocated to the party best equipped to manage it. It is, therefore, critical to assign roles and responsibilities between the public and private sectors appropriately and, to the extent possible, manage risks through measures embedded directly in the contract. One example of this is the inclusion of a provision on data ownership in the PPP contract, where the government retains ownership of all data (including digital data) but may assign to the private party some use-rights for value-added services that can generate additional revenues. At the same time, some risks, such as political risk, go beyond the scope of the contract and can be managed through measures like political risk insurance offered by entities such as the Multilateral Insurance Guarantee Agency (MIGA) of the World Bank Group.

**ES Figure 1:** Situating the Land PPP Operational Framework in the PPP Life Cycle



## **Part IV: Governance Guidance Matrix**

The Governance Guidance Matrix is an initial framework for core capacities and capabilities needed by the public sector entity assessing a land administration PPP, as well as key early-stage considerations for the governance of a land PPP agreement. The Matrix is composed of two key elements:

- The Land PPP Governance Baseline Assessment, which provides guidance on the key questions which should be addressed when examining the regulatory capacity and PPP Agreement
- The Land PPP Governance Guidance Matrix, which provides guidance on the key areas and activities that should be considered at the planning for contract management, contract management, and contract expiry stages of the project

While the core governance elements will be further addressed in the later stages of the PPP Project Life Cycle, the Governance Guidance Matrix allows for governments to begin examining the critical areas of readiness at the earlier stage to ensure proper planning and forethought goes into the governance of the project.

### **Key Takeaways**

The report identifies many lessons across its frameworks and matrices. Some of the report's key takeaways are summarized below:

***Takeaway 1: Depending on the political economy context, land PPPs are possible at certain entry points in land service delivery value chains and can offer potential financial, management, and technology benefits.***

Even though the examples of land administration PPPs in low- and middle-income countries have remained limited, land PPPs are certainly possible, including at the sub-national level. The Operational Framework tools allow governments and development partners to spearhead the consideration of the PPP modality for land administration systems and services. Unsolicited proposals are also becoming increasingly common, heightening the urgency for strengthened government capacity to assess and respond to such proposals.

There are several entry points to consider depending on the context, strategic direction, and system needs. PPPs could help unlock private capital to meet an ongoing strategic reform program (for example, modernization of IT systems) or be considered for priority programs like first registration, where traditional public sector procurement has generally been weak and taken longer than planned. Other financial, management, and technology benefits, as discussed earlier, can also materialize through land administration PPPs. Additionally, PPP contracts could also contribute to reducing corruption within land administration service delivery by introducing specific standards and requirements related to accountability and transparency, with defined penalties and incentives for enforcement.

On the practical level, given the relatively new nature of PPPs in land administration in low- and middle-income countries, it is critical to apply integrated PPP and land expertise when developing a land PPP concept using the tools presented in the report. Similarly, it is important that on the government side, the land agency works closely with the PPP Unit or entity tasked with leading such efforts to ensure internal buy-in, cross-cutting expertise, and that all procedures as laid out in the PPP-related legislation and procedures are followed.

**Takeaway 2: While unique in nature, land PPPs should follow the defined identification, preparation, and implementation processes as outlined in the PPP Project Life Cycle.**

Even though land PPPs are different from more common infrastructure PPPs, it is critical that they follow the PPP Project Life Cycle, including all steps related to identification, appraisal, structuring, procurement, and contract management. The operational tools presented in this report do not replace standard industry methods for appraising PPP projects (for example, pre-feasibility and feasibility studies). Instead they provide support for early-stage analysis, discussion, and preparation that will help governments and development partners navigate the later, more resource-intensive steps of the PPP Life Cycle. In cases where there is a lack of readiness to proceed with a land PPP, the tools are designed in a way that results can be used to identify potential reform areas in the land administration and/or PPP spheres.

Central to the PPP Life Cycle, the importance of an open and transparent process cannot be overstated. Much like traditional procurement methods, PPPs can also be susceptible to corruption. An open and transparent approach will help mitigate the risk of any mismanagement or elite capture. Moreover, government accountability can be enhanced by following an open and transparent procurement process that is rooted in a robust PPP framework and the integrity of institutional and contracting entities. This is particularly important in the context of bringing transparency to and building trust in land administration, which has been identified as a sector with high incidences of corruption.<sup>6</sup>

**Takeaway 3: Governments must fulfill their contractual roles and responsibilities under the PPP contract, proactively managing allocated risks and overseeing the performance of the private sector partner.**

It is important to stress that a PPP arrangement does not entail a passive role for the public sector. It is, after all, a *public-private* partnership, where certain roles and responsibilities will continue to fall on the public partner. Functions related to strategic vision, policy setting, and legal and regulatory interventions will always remain within the government sphere.

Land services' fee setting is one of the most important regulatory functions that will remain a government function to ensure affordability and accessibility. Similarly, important policy initiatives, such as securing women's property rights, can be enforced through the contract by key performance indicators (KPIs) for registering women owners in cases where first registration falls under private sector roles and responsibilities.

In the context of the digital economy, the government should be mindful of data ownership, which is best retained with the public sector to protect government and citizens' interest. At the same time, some use rights could be considered so the private sector could develop value-added services using the data, allowing for additional revenue streams.

In light of the public roles and responsibilities and broader considerations on risks (for example, protection of data/intellectual property), it is critical for governments to build public sector capacity. Government personnel will need to play a central role in the identification, appraisal, structuring, and procuring of the PPP arrangement before assuming oversight and contract management roles, where they will oversee and evaluate the performance of the private sector. This is needed in order to ensure that the general public receives services in line with the standards agreed upon in the contract.

<sup>6</sup>Transparency International 2011.

**Takeaway 4: Concerted early-stage due diligence, project preparation, and related reform considerations can strengthen the remunerative nature of land administration services falling under PPPs.**

Land administration services demonstrate remunerative potential in PPP projects where contractual arrangements between the private sector and governments are appropriately structured and sufficient revenue streams have been identified. It is important to ensure that revenue from land administration services offers sufficient returns to attract private sector interest. The private sector appetite for entering into such agreements and assuming the risks allocated to them under the PPP contract will be dependent on the potential margins that can be made on such an investment.

A robust adherence to the PPP Life Cycle and strengthened government capacity are necessary to ensure projects are developed in a manner conducive to encouraging private sector interest in the partnership. As such, governments must consider the private sector perspective and motivations when conceptualizing potential land PPPs. To allow for this, the operational tools have been designed to incorporate this commercial lens. This approach helps to not only improve the project's commercial viability and bankability, but also, depending on the payment mechanism and context, could allow for revenue-sharing for the government.

**Takeaway 5: Blended finance solutions can increase the viability of land PPP projects and enable the inclusion of certain workstreams with lower commercial value.**

The report's findings reinforce the significant potential for using blended finance mechanisms and new approaches like results-based financing. For example, the public sector, with development partner backing, could support the partial or full financing of first registration efforts, while the private sector can be engaged in the development/modernization of a land information system and e-services. Viability gap funding and other such approaches can help ensure sufficient funding/financing is available to build a sustainable ecosystem in land administration.

Similarly, land registration could rely on performance-based contracts to ensure women's rights are secured by outlining gender-based KPIs. Together, such approaches can make the overall system more sustainable and inclusive in the longer term. Therefore, going forward, development partner projects could mobilize and leverage private capital for the development of a land information system, while financing first registration efforts.

The importance of such approaches is further magnified with the impact of the COVID-19 pandemic and the subsequent recovery process, which will further strain government resources with competing demands and increase existing fiscal constraints, necessitating the exploration of alternative financing, capital, and expertise.

## The Dialogue Moving Forward

Ushering in the development PPPs in land administration requires a crafted analysis that goes beyond replicating the structures and development of existing and past projects in low- and middle-income countries. The report presents an array of analytical approaches and practical tools to be used by government stakeholders interested in exploring the PPP modality. The analysis and tools, while comprehensive, are presented in a way that could be enriched by users and can reflect the local context to support land administration modernization programs.



Exploring the potential of PPPs in land administration will depend on government commitment, the availability and use of resources, and a comprehensive understanding of the benefits and risks for government, private sector, and citizens. To support the assessment of these enabling factors, the report can also be used for policy analysis, supporting pathways for reforms in government systems, and managing risks at the early stages of project development. Where the operational tools' recommended thresholds are met, the government can proceed with the defined next steps that flow into the PPP Project Life Cycle. If the recommended thresholds are not met, governments can use the scorecards as preliminary diagnostic tools to identify potential areas for reform.

In the backdrop of the report's findings, there is a need to reconsider how the World Bank and other development partners finance or fund land administration programs to achieve desired results and ensure the sustainability of development aid. The report and the process behind it show the importance of using blended finance mechanisms and new approaches such as results-based financing. In the future, World Bank-financed land administration projects could further mobilize and leverage private capital to support development objectives. A very specific example could be using World Bank financing to support (partial or full) first registration efforts, while the private sector can be engaged in the development of a land information system/e-services through a PPP arrangement. Where appropriate, the World Bank may also be able to provide financial risk mechanisms to mitigate the political/non-commercial risks for the private sector.

In conclusion, the report seeks to provide essential analytical and operational tools to address the knowledge gaps with respect to land administration PPPs. It also seeks to have contributed to the ongoing discourse regarding the potential uses, risks, and practical aspects of PPPs within the context of solving some of the land administration challenges and their spillover effects on the wider economy. To this end, land PPPs can be considered as an option on the procurement menu. This report shares relevant global experiences, provides good practices for consideration, highlights entry points in land administration service delivery value chains, identifies and rapidly assesses project concepts, strengthens capacity, and simplifies the process of examining PPPs in land administration. It is also recommended that this report be updated after two to three years once additional lessons are learned through the further application of the Analytical and Operational Frameworks in countries and sub-national entities interested in exploring the PPP modality for land administration.



# ANALYTICAL FRAMEWORK

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Part I of PPPs in Land Administration

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# ABBREVIATIONS

BOO	Build-Own-Operate
BOT	Build-Operate-Transfer
BOOT	Build-Own-Operate-Transfer
BTO	Build-Transfer-Operate
CAPEX	Capital Expenditure
CBA	Cost-Benefit Analysis
DBFO	Design-Build-Finance-Operate
DBFOM	Design-Build-Finance-Operate-Maintain
DBFOT	Design-Build-Finance-Operate-Transfer (Construction)
DCMF	Design-Construct-Manage-Finance
EBRD	European Bank for Reconstruction and Development
LA	Land Administration
LAS	Land Administration System
LDO	Lease-Develop-Operate
LIC	Low-Income Country
LIS	Land Information System
MIC	Middle-Income Country
NPV	Net Present Value
NSW	New South Wales
OPEX	Operational Expenditure
PFI	Private Finance Initiative
PPP	Public-Private Partnerships
PSC	Public Sector Comparator
PSP	Private Sector Participation
RBA	Results-Based Aid
RBF	Results-Based Financing
ROT	Rehabilitate-Operate-Transfer
SPV	Special Purpose Vehicle
USP	Unsolicited Proposal
VfM	Value-for-Money

# SECTION 1. INTRODUCTION

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# 01

This is the Analytical Framework, Part I of the Knowledge Product on Public-Private Partnerships (PPPs) in Land Administration.

## 1.1 Analytical Framework: Objective, Structure, and Scope

The primary aim of the Analytical Framework is to provide the technical basis for the assessment parameters and methodologies in the Operational Framework. Through the analysis of existing PPP projects in the land sector and other sectors, this Analytical Framework presents best practices and key lessons learned. Results from this analysis have been used to identify the characteristics of successful PPPs (including those in the land sector), which will form the basis of support material for designing, funding and conducting Concept Viability Analysis on land PPP project concepts in the Operational Framework.

The Analytical Framework focuses on presenting PPP case studies from the land and other sectors to draw lessons learned and key take-aways for PPPs within the land administration sector. The selection of cases in the land administration sector and other sectors was based on the availability of publicly disclosed information, the relevance of the case to the key questions, and the appropriateness of the PPP structure adopted for future land administration projects. Drawing on the conclusions, the Analytical Framework also provides information on countries' and projects' potential assessment mechanisms for the Operational Framework.

The Analytical Framework is organized as follows:

- **Section 1** introduces the Analytical Framework and its purpose.
- **Section 2** provides the scope for the Analytical Framework by defining PPPs and other elements, including Results-Based Financing (RBF), including Results-Based Aid (RBA). The section provides a guiding principles matrix for assessing the parameters of PPPs in the land administration sector.
- **Section 3** provides the scope for the Analytical Framework in terms of land administration, entry points, and case studies from previous PPPs in land administration and comparable sectors (predominantly e-Government PPPs). The analysis of these case studies captured vital lessons and enabled the development of recommendations for future land PPP projects.
- **Section 4** provides an overview of financing considerations, including necessary preparatory work for government agencies to undertake, as well as an overview of possible financing and payment mechanisms.
- **Section 5** provides key considerations and minimum requirements when considering a land PPP.

# **SECTION 2. PUBLIC-PRIVATE PARTNERSHIPS AND RESULTS-BASED FINANCING**

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# 02



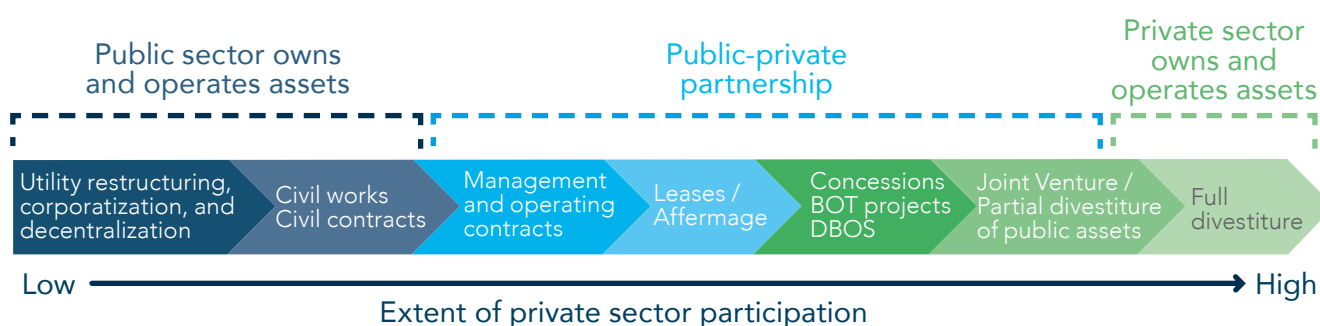
Section 2 provides the context for the Analytical Framework by defining PPPs and RBF in the context of their application to other sectors.

## 2.1 Key definitions

Given that some land administration services, such as registration, have public goods aspects, they may be better suited to public sector provisioning. On the other hand, some land administration services, such as field surveys, development of land information system, e-services etc. can benefit from private sector participation to introduce efficiencies and reduce costs of service delivery. This section discusses the PPP model in general to set the stage for more specific discussions on land administration PPPs in the following sections.

Private sector participation (PSP) in the provision of infrastructure and services comes in multiple forms (see Figure 1). To develop a common understanding of what constitutes a PPP, the following section establishes what a PPP is and how RBF approaches link to PPPs.

### 2.1.1 Private Sector Participation



The World Bank PPP Knowledge Lab<sup>1</sup> defines a PPP as:

*"a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance."*

The PPP model emerged in the 1990s as a vital tool for the implementation of critical services, including the restructuring of public service provision modalities along organizational efficiency lines to meet social needs, combat social exclusion, enhance local community development, and develop cost-effective critical services. While there is no universal definition of PPPs that is applicable to all sectors and projects, this report adopts a benchmark definition to appropriately address the scope of PPPs in land administration, drawing on definitions by the World Bank and other development organizations.

It is important to note that there is a large degree of variance in the contractual structures entered between governments and private enterprise. Some of these contracts may share certain characteristics of a PPP with regards to being long-term and performance-related, but still do not meet the overall threshold established by the definition provided above.

<sup>1</sup>[www.pppknowledgelab.org](http://www.pppknowledgelab.org)

For the purposes of this report, it is instructive to identify the forms of public procurement that do not constitute a PPP. Although “management” contracts often include performance-based indicators for an incentive / penalties scheme (similar to PPPs), outsourcing arrangements do not involve substantial private investment and responsibility for long-term management of public assets or services. Furthermore, while “Design-Build” contracts may appear to be PPPs *prima facie*, they are typically viewed as short-term contracts for simple projects that do not include operation and maintenance responsibilities. Finally, “privatization” is distinct from PPP as the contractual relationship of the former hinges on the permanent transfer of ownership rights and liabilities over a public asset or facility from the public sector to a private operator. Figure 1 provides an illustration of the spectrum of the types of PSP arrangements which can be considered.

In general, those arrangements with a lower extent of PSP (for example, management contracts or leases) pass along fewer risks to the private party. Conversely, arrangements with a higher extent of PSP often correlate with more risks being transferred to the private party.

Although the participation of the private sector in land administration projects is more common

### 2.1.2 Results-based financing

For the purposes of this analysis, RBF has been defined as *“a financing arrangement in which part of the payments are contingent upon the achievement of predefined and verified results.”*<sup>2</sup>

By linking payments to results, RBF schemes strengthen accountability in project delivery. Additionally, by focusing on the delivery of outcomes or outputs, it has been observed that RBF programs facilitate the building of local capacity and the development of innovative solutions that are difficult to achieve in programs where financing is provided upfront, with hopeful ties to the intended results.

## PPPs in Land Administration

Canada and Australia provide instructive examples of countries that have contracted public service functions related to land administration to a private party in a manner that meets the definitional threshold of a PPP. In these countries, a long-term relationship with a private operator was established to improve the land administration system (in this case, the asset). In both situations, the private operator has taken significant operational and market risk with remuneration tied to transaction fees and service delivery. These two case studies are analysed in Section 3.

in LICs/MICs, there are limited case studies in which land administration projects fit the definition of PPP. It may be common to see outsourcing contracts for goods and services in such projects, yet these relationships rarely involve complex risks quantified on the grounds of comprehensive technical and financial analysis.

## RBF in Land Projects

RBF can be applied in land administration projects and can be an important mechanism to encourage results as it has the potential to directly link performance with payment.

Payments, for example, to a land PPP concessionaire could be partially based on meeting KPIs in areas such as the completion of first registration or shortening transaction processing time. Governments can also use this mechanism to introduce requirements related to public policy, such as gender equity and accessibility to low-income populations.

<sup>2</sup>Global Partnership for Results-Based Approaches, *A Guide for Effective Results-Based Financing Strategies* (2018), p 11.

At the same time, RBF should not be considered a panacea, as there are important limitations in applying RBF programs, such as the capacity of the service provider to pre-finance a program towards the agreed-upon results. Additionally, it is critical for RBF programs to operate within a supportive institutional environment that will enable service providers to focus on achieving results.

Experience across sectors demonstrates that RBF can support the development of well-targeted approaches on issues of strategic importance, such as securing land and property rights for vulnerable groups, women and indigenous peoples, as well as system modernization targets.

RBF approaches can be developed under a gap-funding or incentive-driven framework or hybrid schemes tailored to public-private partnerships (PPPs).

- Gap-funding approaches can support the poorest households and communities in securing their property rights. This is done, by subsidizing part of the cost for registering their properties, which involves paying for legal, surveying, and administrative services. Once defined, the allocated subsidy amount is provided upon verification that the property titles for the targeted households and communities have been issued according to agreed-upon standards. A similar approach could be developed for modernizing land-administration systems.
- Incentive-driven approaches can support system-level changes in the operational model of land-administration systems and services. Such support could motivate efforts to improve client satisfaction in transactions with land agencies, promotion of women's rights, or the building of trusted delivery-focused programs in conflict-affected areas. Furthermore, for first registration services with legal and institutional complexities, such schemes could encourage public authorities to intervene and identify solutions that couldn't be realized without incentives. In these cases, all parties (funders, implementing agencies and service providers) agree on commonly recognized needs and related measurable targeted outputs and outcomes that are closely monitored. In principle, the financing structure is not different from the gap-funding approach.
- Hybrid schemes bring together gap-funding with incentive-driven approaches are relevant to the development of PPPs. Such schemes could mobilize funding in phases of the PPP transaction where there is a funding gap in the commercial viability, or "bankability" of the project, and apply incentives in the performance of the private party—or penalties, if the performance of the public and private parties doesn't meet the PPP conditions. In the context of commercial viability, RBF can strengthen the reliability of cash flows in phases of the project with high perceived risk for the private party (e.g. first registration).

The structure of RBF solutions can take different forms and be tailored to operational needs. Structures could range from one-off subsidies in the delivery of first registration services (to account for the cost of conducting first registrations in targeted areas and reflecting specific community needs) to phased-funding schemes that account for productivity gains, and approaches that balance the amount of funding to fee collection. For more information on this topic, please see a knowledge note titled 'Securing Land and Property Rights: Exploring the Scope for Results-Based Financing Approaches', available on [gprba.org](http://gprba.org).

## 2.2 PPP Business Models: The Three Pillars

PPPs constitute a business market for private companies, but governments often design them. To facilitate an understanding of the business proposition from the point of view of private investors, the PPP model has been simplified into three pillars. These pillars are explained in the following sub-sections.

## 2.2.1 Pillar 1: Category of the Project and Asset under Consideration

The characteristics of a project define the risk and return for the private sector and the Value for Money (VfM)<sup>3</sup> proposition for the government. Therefore, private companies and governments are interested in understanding the category of the project and asset involved in the proposed PPP. This classification forms the first pillar of a PPP. Three possible PPP project categories exist:

- A *Greenfield* project is one that involves the design and development of an entirely new investment or asset (e.g. first registration scheme using systematic registration or the development of a land information system (LIS)).
- A *Brownfield* project refers to the rehabilitation and upgrade of an existing investment or asset (e.g. digitization of land records or upgrade of a LIS).
- A *Yellowfield* project is a secondary stage project in which an already concession asset is offered again to the market once the initial concession period is completed. Normally, yellowfield PPPs include significant investment in the renewal, refurbishment, or expansion of existing sites and/or facilities. However, a Yellowfield project is commonly associated with a better understanding of costs and revenues than a Brownfield one (e.g. concession of administering transaction after Greenfield PPP).

## 2.2.2 Pillar 2: Functions of the Private Party

The second pillar of a PPP addresses the required functions of the private party. These are likely to be complex, given the broad scope of contractual arrangements that define most PPP projects, and must be tied to the type of asset and service required under the investment project in question. Figure 1 describes the five principal functional categories under which projects may be grouped.

**AF Figure 1:** Five principle PPP project functions of the private party

Private Party Function	Description
<b>Design</b>	The design of an asset from the initial stages based on specific specifications.
<b>Build or Rehabilitate</b>	The construction of required infrastructure/facilities or carrying out of repairs and associated rehabilitative works to ensure existing assets are serviceable.
<b>Finance</b>	The obligation to secure financing for the development of the project and to cover payments to the private party and (if applicable) the public sector.
<b>Maintain</b>	This refers to the first part of the “management” elements in most PPPs. It focuses on ensuring that the asset is operational and returned to the government per the conditions in the contract.
<b>Operate</b>	The second component of the “management” element relates to the provision of technical and commercial operations either directly to users, to a government contractor, or alongside a government entity providing a related service.

<sup>3</sup>PPP Knowledge Lab definition on VfM – “Value for money means achieving the optimal combination of benefits and costs in delivering services users want. Many PPP programs require an assessment of whether a PPP is likely to offer better value for the public than traditional public procurement—often called value for money analysis.” <https://pppknowledgelab.org/guide/sections/54-assessing-value-for-money-of-the-ppp>

The possible PPP contractual combinations, as described in the Public-Private Partnerships Reference Guide Version 3 (2017)<sup>4</sup> include:

- Design-Build-Finance-Operate-Maintain (DBFOM)
- Design-Build-Finance-Operate (DBFO)
- Design-Build-Finance-Operate-Transfer (Construction) (DBFOT)
- Design-Construct-Manage-Finance (DCMF)
- Build-Operate-Transfer (BOT)
- Build-Own-Operate (BOO)
- Build-Own-Operate-Transfer (BOOT)
- Build-Transfer-Operate (BTO)
- Rehabilitate-Operate-Transfer (ROT)
- Lease-Develop-Operate (LDO)
- Concession
- Private Finance Initiative (PFI)
- Operations and Maintenance
- Affermage
- Management Contract
- Franchise

The intensity of the private party participation allows the differentiation of PPPs along the PSP spectrum.

### 2.2.3 Pillar 3: Payment Mechanisms

The third pillar of the PPP business model relates to the payment mechanism, which is the method through which the private party is compensated for services provided. Payment mechanisms can include tariffs, user payment for the service (e.g. toll roads), or payments that governments make directly to the service provider (e.g. availability payments for facilities or subsidies), or a combination thereof. Under a user-pays arrangement, the private party typically receives payment through tariffs or tolls directly tied to contracted service performance.

An arrangement with a donor or funding provider using RBF would fall within this third pillar and would likely take the form of availability payments.

The government may also provide support in the form of complementary payments or subsidies that are triggered upon the achievement of

#### Payments in land administration PPPs

The NSW (Australia) land administration PPP provides payments to the private party based only on land transaction fees. The PPP was awarded based on the largest upfront payment offered to the government. The successful consortium made an upfront payment of around \$2 billion to the NSW government for a 35-year concession.

certain milestones. In a government-pays PPP, the government compensates the private party for “providing” the service or making a product “available”. This typically takes the form of an availability payment scheme or one or more lump-sum payments tied to contractual reviews of the quality of service being delivered at any stage of the investment project life cycle.

<sup>4</sup><https://openknowledge.worldbank.org/handle/10986/29052>, pages 7-8.

## 2.2.4 Guiding Principles for PPPs in LICs/MICs

**PPPs in LICs/MICs: Example from Timor-Leste:** There is no one-size-fits-all PPP best practice approach. There are, however, common guiding principles and precepts that countries with successful PPP programs adopt and that can be adapted to specific country contexts. While these are equally applicable to high-income and LIC/MIC country contexts, their implementation can be constrained in the latter. For example, high-income countries can rely on greater and more reliable access to resources (financial, institutional etc.) than most LICs/MICs.

Countries with scope for improvement in economic assessments (such as the World Bank's Doing Business Index) can also have well-structured and effective PPP regimes. For example, Timor-Leste was ranked 178 of 190 countries in the Doing Business 2018 publication (with a ranking of 187 on the Registering Property indicator). However, the *Infrascope Index*<sup>1</sup> ranked it 9<sup>th</sup> and 4<sup>th</sup> out of the 40 countries surveyed for the Regulations and Institutions PPP indicators, respectively. Timor-Leste is a post-conflict country facing significant economic hurdles, but it has established sound practices, which have led to the successful contracting of two PPP projects in the telecom and electricity sectors. In addition, a contract award was made on December 2017 for a Greenfield port in Tibar Bay to be developed as a PPP on a DBFOT basis.

## 2.3 The Financial Basis of a PPP

The financial basis of a PPP covers the compensation the government pays to private parties—generally through a special purpose vehicle (SPV)—as well as the specific payment mechanism adopted. This section will focus on the project finance dimension, whereas payment mechanisms are deconstructed further in Section 4.

When structuring PPPs, consideration must be given to the provision of financing options, such as guarantees, equity, or debt contributions. This is because, as distinct from traditional methods of public procurement, PPPs typically task the private sector with the responsibility of mobilizing private finance for investment in public infrastructure and services, as well as that of identifying investors. This

### Risk is a key challenge to financing PPPs in Land Administration

As PPPs in land administration are relatively new, there should be special focus on the commercial feasibility of projects to ensure that revenue flows can meet financial commitments and facilitate private sector interest. In this, RBF could be a facilitator by transferring or allocating risk to the party best able to manage the risk.

To reduce investment risks, financial models become a key decision tool for PPPs in land administration. These models need to be carefully considered and designed from an early stage due to the relative lack of previously executed models with a history of success (see Section 3 case studies for further information).

approach is commonly identified as “project finance”, which refers to various techniques of financial engineering to raise equity and long-term debt financing for major projects through bonds or other financial instruments. It requires lending against the cash-flow generation of projects, which, in turn, is reliant on the detailed analysis of potential risks (whether commercial, legal, or political) and their allocation between the respective parties to the transaction.

### Special Purpose Vehicles

The World Bank defines a SPV as “an entity created to undertake a single task or project in order to protect the shareholders with limited liability, often used for limited or non-recourse financing.” Further information on the SPVs can be found in the World Bank and other donors' *PPP Reference Guide*.

The development of the specific financial structure suitable for a project relies on modelling to determine the expected cash flow, accounting for revenue from user fees and government payments, as well as capital expenditure (CAPEX) and operational expenditure (OPEX). The financial analyses that can be performed include commercial feasibility, economic feasibility, fiscal affordability, impact on government debt and deficit, and VfM. Commercial feasibility, particularly for land projects, is the one of the most critical. It considers all expected revenue, costs, taxes, and other private sector investments, as well as other assessments of the cost of loans and equity, insurance, and inflation.

A private party will typically consider a project commercially feasible when expected revenue flows are sufficient to meet financial commitments generated by operational costs, including maintenance, taxes, debt servicing, and invested equity, in addition to a return. However, the specific parameters of the feasibility exercise will vary depending on the payment mechanism adopted (i.e. how the private party is compensated), including circumstances where payments fluctuate to reflect performance or risk.

# SECTION 3. LAND PPP ENTRY POINTS AND CASE STUDIES

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# 03



PPPs in land administration are not new, but they are not always well understood due to the relatively small number of PPP schemes, many of which have been executed in high-income countries. Most existing PPPs in land administration are effectively examples of e-Government PPPs as they are technology-centric PPPs. The World Bank defines e-Government as “the use of information and communications technologies used by governments to enhance the range and quality of information and services provided to citizens, businesses, civil society organizations, and other government agencies in an efficient, cost-effective and convenient manner, making government processes more transparent and accountable...” E-Government PPPs are PPP projects which deliver such services. For example, e-Government PPPs can include the provision of a one-stop shop, trade single windows, business registry, and other type of information and communications technology solutions through a PPP contract.

There is potential for land administration system improvement through PPP mechanisms, as well as a need for the further investigation of potential models that could address the registration gap present in many LICs/MICs.

This section presents the analysis conducted for the land sector in relation to PPPs along with potential entry points as well as case studies,

### 3.1 Land Administration and Management

Land is a fundamental resource that needs to be managed and administered by government in a manner that addresses typically broad political, economic, social and environmental objectives for the current population and for the benefit of future generations. An important tool in ensuring that land addresses these broad objectives is a land administration system (LAS). A LAS may include the following major aspects:

- a. the recording and registration of private rights in land;
- b. the recording, registration and publicising of the grants or transfers of those rights in land through, for example, sale, gift, encumbrance, subdivision, consolidation, etc;
- c. the management of public land;
- d. the control of the use of land, including land use zoning and support for the development application/ approval process; and
- e. the management of the fiscal aspects related to rights in land, including land and property tax, historical sales data, valuation for a range of purposes including the assessment of fees and taxes, and compensation for state acquisition of private rights in land, etc.

It is important to note that LAS does not simply refer to an IT system but to the entire ecosystem of land administration policy, procedures, systems, and services.

Land administration operates within the policy, legal and institutional framework of the country. Although there are generic approaches or methodologies adopted in a land administration system, such as the options of deed or title registration, there is great variety in how these systems are implemented in practice. There is, therefore, no universal model of land administration system.

There are some important factors that need to be recognized. From a **policy/legal** perspective:

- a. In countries with a colonial background, there is often a dual land administration system: imported systems based on western models operate in urban areas and areas formerly occupied by colonial settlers, and customary systems operate elsewhere.
- b. There is varied recognition of customary tenure. There is an explicit recognition of customary rights in some countries, while other jurisdictions do not formally recognize customary rights. Where customary rights are recognized, there are differing approaches to how these are recorded in the LAS.
- c. Not all tenures may be recognized in the formal LAS and difficult or expensive LAS procedures may force people into an informal system of gaining access and recognition of property rights.
- d. Land classification plays a major role in many LASs (for example, many countries do not recognize private rights in land classified as forest land).

From an **institutional** perspective:

- a. Land administration services are provided through many different modalities. In some countries, LAS is provided by a single agency, but in many countries land administration (LA) services are provided by different agencies, often in different Ministries (for example, many countries record rights and dealings in rights in a registry operated by the Ministry of Justice, while the survey and mapping of properties is managed by a Cadastral agency in another Ministry).
- b. There are also many different modalities for the level of government that provides services. In some countries the cadastral survey is a national responsibility and the registry is a local government responsibility, while in others it is the reverse.

From a **procedural or implementation** perspective:

- a. Government has a key role. Government establishes and maintains the policy and legal frameworks for land administration and establishes and maintains the government institutions that provide LA services.
- b. Many of the LA services require formal approval of a government official. In many countries, first registration can only be approved by a government official.
- c. Government typically establishes the standards for key LA services (for example, the specifications for cadastral surveys).
- d. Notaries, lawyers, private surveyors, and other intermediaries play a significant role in many land administration systems, while in others this is not the case. These private parties can act to resist any change that threatens their interests (for example, surveyors are usually very strong proponents for accurate, but often expensive and time-consuming survey methodologies).
- e. Governments can often generate significant revenue from the provision of LA services. This revenue is typically raised both on a transaction and an annual tax basis. This revenue typically goes into consolidated government revenue, but there are often long-term agreements in place to allocate part of this revenue to the land agency, other agencies, local government, and service providers (such as notaries, lawyers, surveyors, ICT suppliers etc.) As a result, many agencies delivering LA services may not have a complete grasp of their own revenue streams or potential.

Countries with less well-developed LASs face the cost of first establishing a LAS with broad geographic cover and the records and procedures to support it (“first registration”), in addition to the direct cost of providing LA services to those requesting services. There are many different approaches to first registration. In many countries this is a government function, while in others it can be outsourced to the private sector. In many countries, government requirements (for establishing rights or surveying properties) can make first registration very expensive.

These important contextual factors need to be recognized and addressed in any attempt to develop a land PPP concept, particularly around systematic registration.

### 3.2 Potential for Land PPPs

The advantages of using PPPs in land administration are numerous:

- The ability to bring capital and finance to improvements, technology, modernization, and updates;
- The ability to bring know-how to improvements;
- The ability to maximize efficiencies and cost savings through private sector know-how and management practices;
- The improvement of procedures for setting up land registration in countries in LICs/MICs;
- Mutual economic benefits (outsourcing of work, delivery of value-added services) through appropriate business models, development of new market segments;
- Increased flexibility of land registration services;
- Promoting the use of geospatial base data for additional (e.g. private sector) customer groups; and
- Improved customer orientation of land administration services.

Technology is not the sole driver of PPPs in land administration. Arguably, more common drivers include the lack of financial resources for investment in capital expenditure to replace legacy systems; the lack of other resources, such as qualified staff, to implement legal or procedural change; an identified reduction in future operating costs due to automation, a reduction of the risk in investment, and the introduction of process efficiencies delivered via technology. **Ultimately, however, the most common underlying macro level drivers of PPPs in land, and land sector reform more broadly, are market forces, governing political interests, or a combination of the two. Having a clear understanding of the macro level drivers at play is critical for the conceptualization of any potential land PPP intervention. A similar lens could also be applied to the design of donor led assistance in the sector.**

### 3.3 Land PPP Entry Points

Within the spectrum of services deemed applicable to PPPs, certain PPP structure options emerge as being more suited for each category of services, or “land service delivery value chains”. AF Figure 2 provides an indicative breakdown of where, and how, PPP entry points could exist within these value chains and their associated land service delivery streams. The latter have been identified as those aspects of typical land agency operations and services most likely to lend themselves to inclusion within a potential land PPP transaction. Such a transaction might apply to a single service stream or a combination thereof.

For the sake of simplicity, and due to overlaps already seen to date, the “Design” and “Build” phases of typical PPPs have been combined, as have the “Operate” and “Maintain” phases. It should also be noted that the sequencing of these phases may change in order to align to the structuring of a particular transaction.

For example, consider the case of the NSW Land and Property Information (LPI) transaction in Australia. The Concessionaire, Australian Registry Investments (ARI), assumed operational responsibility for delivering land registry services from “day zero.” This included assuming control of all associated registry assets, including legacy IT systems. However, while ARI continued providing steady state operations for the registry, it also commenced the design and build of new processes, IT systems, and staffing frameworks that would deliver greater operational and cost efficiencies.

Due to the continually evolving nature of technology, it is more likely to see many longer-term transactions interspersed with design and build phases across their operate and maintain lifecycles. Based on experience to date in high-income countries such as Australia, UK, Canada, USA, these major IT systems replacements, as opposed to upgrades and maintenance, have occurred on a 15 to 20-year timeline. It is expected that such timeframes will be reduced significantly going forward, unless land agencies and concessionaires adopt more aggressive forward-looking strategies for their technology modernization initiatives.

The Design/Build and Operate/Maintain columns of the table depict, at a high level, the possible entry points for potential PPPs to commence on the land service delivery value chain. They also take into consideration the need for flexibility in those instances where a long term “Lease-Develop-Operate” type concession (e.g. NSW LPI case study) comes into play for example.

By the same token, the figure outlines the possibility for more discrete services to be included within PPP transactions, such as those focused purely on developing, operating, and maintaining new land registry IT systems. The Northern Ireland Land & Property Service (LPS)<sup>7</sup> and UK HM Land Registry were both early adopters of this PPP/Private Finance Initiative (PFI) model around the year 2000.

**It is critical to note, however, that the AF Figure 2 is not exhaustive in its coverage of possible service delivery streams, nor does it purport to provide a “one size fits all” solution. Each potential transaction must be assessed individually through pre-feasibility and viability analyses to determine the most appropriate PPP structure within the country context.**

For a point of comparison, the figure includes a column highlighting those service delivery value streams where development partners like bilateral and multilateral donors most often target their assistance to LICs/MICs and emerging economies. This support could come in the form of grants or loans. This is reflective of traditional areas of expertise, and the nature and duration of procurements as compared with the longer-term engagement options presented by PPPs. This can also help development partners target private sector participation alongside their own interventions.

In addition, a column showing areas of possible assistance or interventions under alternative financing is provided for the information of governments and development partners. This accounts for scenarios where private sector partners may bundle buyer side financing (e.g. UK Export Financing, Korea Eximbank, Export Development Canada, China Exim Bank, etc.) as part of their offering to governments via Unsolicited Proposals (USPs).

<sup>7</sup>[http://www2.bt.com/static/i/media/pdf/lrni\\_cs.pdf](http://www2.bt.com/static/i/media/pdf/lrni_cs.pdf)

AF Figure 2: Land PPP Entry Points

Service Delivery Value Chains	Land Service Delivery Stream	Likely Donor Assistance Areas	Alternative Project Finance Options	Potential Land PPP Entry Points	
				Design and/or Build	Operate and/or Maintain
<b>Management &amp; Operations</b>					
	Strategic planning	✓	✓		
	General IT support		✓	Establish IT infrastructure or provide support to existing environment	Provide ongoing managed services and tech upgrades
	Financial management & systems		✓	Develop new team, procedures and systems, or provide support to existing environment	Provide ongoing managed services
	HR management & systems		✓	Develop new team, procedures and systems, or provide support to existing environment	Provide ongoing managed services
	Workforce planning & change management	✓	✓	Design optimized service delivery workforce. Recruit new staff or transfer government staff, if required	Ongoing change management across organisation for optimal service delivery resourcing
	Process & procedure reengineering	✓	✓	Design new processes, procedures and forms	Ongoing efficiency improvements
	Value added products & services		✓	Develop new data products and services or provide support to existing service provider contracts on behalf of Government	Ongoing innovation and development of new data products and services, or maintain delivery to existing third party suppliers
	Front Office Customer Services		✓	Establish new team or transfer government staff	Ongoing delivery of services to public
<b>Land Register</b>					
	eConveyancing	✓	✓	Design and develop new solution	Ongoing development, maintenance and provision of services to public
	Systematic titling & registration	✓	✓	Undertake field and office campaigns	
	Title document scanning & digitizing	✓	✓	Establish new document conversion production line, or provide support to existing environment	Ongoing document conversion, maintenance of hardware and systems
	Title document examination (BPO)	✓	✓	Establish new examination team or transfer government staff	Delegated authority for examination functions being executed
	Transaction processing & document management systems	✓	✓	Design and develop new solution or provide support to existing IT asset	Ongoing development and maintenance for digital transactions

Service Delivery Value Chains	Land Service Delivery Stream	Likely Donor Assistance Areas	Alternative Project Finance Options	Potential Land PPP Entry Points	
				Design and/or Build	Operate and/or Maintain
<b>Spatial Data Infrastructure</b>					
	Spatial Data Infrastructure	✓	✓	Design geodetic network and establish necessary IT systems	Ongoing operation and maintenance of systems
	National base mapping	✓	✓	Production of national multipurpose base map and associated IT platforms	Ongoing custodianship of IT systems and data updates
	Systematic cadastral mapping & surveying	✓	✓	Conduct large scale field campaigns in support of titling and first registration to build foundational legal cadastral data infrastructure	
	Cadastral plan examination (BPO)		✓	Establish new plan examination team or transfer government staff	Delegated authority for plan examination functions being executed
	Cadastral data management system	✓	✓	Design and develop new solution or provide support to existing IT asset	Ongoing development and maintenance for new plan submissions
	Cadastral data layer updates		✓		Automated or semi-automated updates to cadastral fabric with new plan data
<b>Valuation &amp; Taxation*</b>					
	Tax roll preparation	✓	✓	Preparation of initial property tax maps and valuation rolls	
	Tax roll updates		✓		
	Computer Assisted Mass Appraisal (CAMA) & valuation software			Design and develop new solution or provide support to existing IT asset	Ongoing development and maintenance for new valuation models and revaluation cycles
	Property tax billing & collection software	✓	✓	Design and develop new solution or provide support to existing IT asset	Ongoing development and maintenance for new valuation models and revaluation cycles
	Property tax collection services (BPO)		✓	Establish new plan examination team or transfer government staff	Ongoing revenue collection and reconciliation services on behalf of government
	Property revaluation campaigns		✓		Mobilise field teams or new technology applications for regular revaluation cycles

\* Even though 'Valuation and Taxation' entry points fall under property taxation, they are listed here under Land PPP Entry Points due to the linkages between land administration and property taxation.

### 3.4 PPP case studies in the land sector

Although there are notable long-term land administration relationships and systems involving the participation of public and private entities, the analytical efforts presented here concentrate on cases where a defined project was undertaken and sufficient publicly-disclosed information was available to draw lessons that could be applied in future land administration reform projects in LICs/MICs. A high-level review of PPPs in land administration shows that most projects in developed countries have focused on the introduction of technology and systems to provide government functions more efficiently. LICs/MICs have tended to use PPPs for the combination of building the system or rendering it more efficient.

Six case studies of land administration PPPs are presented in AF Figure 3.

**AF Figure 3:** Land Administration PPPs Case Studies

No.	PPP Project Location	Land Administration Services	PPP Model and Financial Structure	Involved Parties	Main Features
1.	<b>Electronic Land Registration System (ELRS): Teranet in Ontario, Canada</b>	<i>Services Provided:</i> Digitization and Operation of an electronic land registry system	<i>PPP Model:</i> Concession  <i>Financial Structure:</i> <ul style="list-style-type: none"> <li>- A large investment payment to the government upfront and the sharing of revenues thereafter;</li> <li>- Incentives scheme whereby private sector partner receives revenues only on automated transactions</li> </ul> <p>In the early 1990s, the government released a request for proposals under specific conditions including 50/50 ownership, a significant financial investment by the private partner, government ownership of the data, and completion of the project in less than 15 years:</p> <ul style="list-style-type: none"> <li>- Each party contributing C\$29 million (1991 equivalent) of equity (Real/ Data in cash; government in kind, via hardware and software)</li> <li>- Government receiving a 25% royalty from registration related revenue and 5% royalty from non-registration services</li> <li>- Government and private sector consortia entitle to dividends provided to shareholders, based on the 50/50 partnership.</li> </ul> <p>An investment return was not anticipated until the end of the 10-year period.</p>	<i>Public Sector:</i> Government of Ontario, Ministries of Consumer and Commercial Relations, Environment, Transportation, Finance, Industry & Trade  <i>Private Sector:</i> Teranet, Teramira Holdings, Borealis Infrastructure and Ontario Municipal Employee Retirement Services	<p>In May 1991, Teranet assumed the government's financial and contractual responsibility for the implementation and operation of Ontario's Land Registration System:</p> <ul style="list-style-type: none"> <li>- Charged with delivering an electronic system that would allow all participants in property transactions to lodge and settle those transactions electronically,</li> <li>- Exclusive provider of online property search and registration in Ontario, and</li> <li>- Private provider was to own and be responsible for the design and maintenance of the ELRS.</li> </ul> <p>The government retained ownership of all data.</p>

No.	PPP Project Location	Land Administration Services	PPP Model and Financial Structure	Involved Parties	Main Features
2.	Land and Property Information Concession: New South Wales, Australia	<p><i>Services Provided:</i></p> <p>Provision of all existing registry and titling (transaction-driven) services</p>	<p><i>PPP Model:</i> Concession</p> <p><i>Financial Structure:</i></p> <ul style="list-style-type: none"> <li>- The PPP was offered as a 35-year concession, but requirements around technology upgrades and process reengineering are publicly available.</li> <li>- In 2017, The consortium, Australian Registry Investments (ARI) provided AUD\$2.6 billion (\$2 billion) upfront to the state government for the concession of titling and registry services.</li> </ul>	<p><i>Public Sector:</i> NSW Government, Land and Property Information (Department of Financial Services) NSW Government, Office of the Registrar General.</p> <p><i>Private Sector:</i> Australian Registry Investments (ARI) trading as NSW Land Registry Services (LRS). The ARI consortium comprises First State Super, Royal Bank of Scotland Group's pension fund, Utilities Trust of Australia Registry Investments Fund (managed by Hastings &amp; Co.), and The Infrastructure Fund (managed by Macquarie Infrastructure and Real Assets)</p>	<p>This consortium is responsible for the costs of operating the registry as well as retaining the revenue from the services. The enabling legislation<sup>8</sup> also provides for the transfer of titling and registry assets of a public sector agency to a private sector operator, or any other public sector agency.</p> <p>The NSW government retains spatial services, surveying roles, valuation services, etc.</p> <ul style="list-style-type: none"> <li>- Office of the Registrar General (ORG) established as a new external regulatory to monitor and enforce the PPP operator's performance.</li> <li>- ORG will have real-time visibility of the registers, audit powers, power to penalize the operator for failing to meet performance standards, and powers to step in/take control/end the concession, if there is a threat or likely threat to the integrity of the register.</li> </ul> <p>Government staff are provided with employment guarantees for a period of four years, which also protects existing staff benefits (such as pension/superannuation), but with no guarantee beyond this.</p>

<sup>8</sup>Land and Property Information NSW (Authorised Transaction) Act 2016, No. 46, <https://legislation.nsw.gov.au/#/view/act/2016/46/full>



No.	PPP Project Location	Land Administration Services	PPP Model and Financial Structure	Involved Parties	Main Features
3.	<b>Land Titling Computerization Project 2007-2020: Philippines</b>	<p><i>Services Provided:</i></p> <p>Computerization (digitization) and operation of the land registration and titling system.</p>	<p><i>PPP Model:</i> Build-Own-Operate</p> <p><i>Financial Structure:</i></p> <ul style="list-style-type: none"> <li>- Partial international financing loan of \$20M of an estimated \$82M cost. Implemented by a consortium of companies under the name of LARES.</li> <li>- In 2003 the project was funded with an 8-year \$22 million loan. Total investment at that time was estimated at \$90 million.</li> <li>- In 2013, IL&amp;FS Global Financial Services Pvt. Limited (IFGSL) refinanced the project debt by arranging PHP 6,567 million (~\$139 million) from Philippine Banks.</li> <li>- A second round of financing was then sought in 2016, which led to a reduction of high cost sponsor debt, reduction in the rate of interest, and release of liquidity to the parent entity (achieving an overall cost saving of 4%).</li> </ul>	<p><i>Public Sector:</i> Land Registration Authority (LRA), under the Ministry of Justice</p> <p><i>Private Sector:</i> Land Registration Inc. (LARES, Philippines) – PPP operating company, established in the Philippines as a subsidiary of IL&amp;FS Technologies India, part of the IL&amp;FS group, one of India's infrastructure and finance companies.</p>	<p>A consortium of companies was formed under the name 'LARES' (Land Registration Incorporated) and approved in 2000. Notice to proceed was issued on 16 January 2001.</p> <p>The PPP was conceived as a 10-year project with the following activities to be undertaken by the successful concessionaire:</p> <ul style="list-style-type: none"> <li>- Conversion of existing LRA records into digital format</li> <li>- Digitization of some 160 registers of deeds, 16 regional registers and the Manila Central Office, including automation of document imaging and improved workflows</li> <li>- Improved security of records</li> <li>- Installation of LAN and WAN infrastructure for all LRA offices to enable web publishing of land titles</li> <li>- Provision of all required ICT services necessary to establish the Land Registration and Titling System and all interfacing subsystems, including re-engineering of LRA business processes, system security and maintenance, public awareness, documentation and facilities upgrade</li> <li>- Pilot testing of the system in 3-5 priority Regional Registers and scale-up nationwide</li> <li>- Project financing</li> <li>- Upgrading of the system in its 7th year</li> </ul>

No.	PPP Project Location	Land Administration Services	PPP Model and Financial Structure	Involved Parties	Main Features
4.	Bhoomi <sup>9</sup> : Karnataka, India	<p><i>Services Provided:</i></p> <p>Land records computerization and localized computer infrastructure, Property registration, e-conveyancing etc.</p>	<p><i>PPP Model:</i> Build-Own-Transfer</p> <p><i>Financial Structure:</i></p> <p>The pilot project, commencing in 2000, was financed by the Government of India.</p> <ul style="list-style-type: none"> <li>- Data entry operations were estimated to have cost Rs 80 million (~\$1.8 million),<sup>10</sup></li> <li>- unit cost of hardware and computer room/kiosk construction was estimated at Rs 0.64million (~\$0.014 million) per taluk.<sup>11</sup></li> <li>- Total out of pocket expenditure was estimated at Rs. 185million (~\$4.1 million), excluding the cost of software development which was provided by the National Informatics Centre at no additional cost to the project.</li> </ul> <p>NB. Central government funding was a key catalyst to the project, since state government were unlikely to have taken up a project of this magnitude without central funding.</p> <p>In commencing the PPP, 3i Infotech provided initial funding</p> <ul style="list-style-type: none"> <li>- investing Rs 460 million (~\$10.2 million) to set up tele-centres at government premises.</li> </ul> <p>User fees increased, initially to Rs15 (~\$0.33, for a copy of the RTC), with Rs5 (~\$0.11) going to the PPP operators. This fee eventually increased to Rs25 (~\$0.56), with Rs 10 (~\$0.22) retained cover operational costs and return on investment.</p> <p>Fees for other services were higher, ranging from Rs 20-35 for mutation requests, with stamp duty around 8% and registration fees around 1%.</p>	<p><i>Public Sector:</i> Ministry of Rural Development, Government of India and Department of Revenue, Karnataka co-funded the pilot phase of the project. National Informatics Centre (NIC; software company owned by the Government of India) developed initial software application.</p> <p><i>Private Sector:</i> PPP consortium</p> <ul style="list-style-type: none"> <li>- N-Logue Communications Pvt. Ltd. (a company owned by the Indian Institute of Technology, Chennai). Developers of the low-cost communication technology to connect kiosks in individual villages.</li> <li>- Comat – content development, deployment and operation of village level kiosks</li> <li>- 3i Infotech – provided financial support</li> </ul>	<p>Separate service delivery points were reduced from 9,000 (the number of village level accountants) to 177 (although a further 800 were added). This evolved into a network of connected kiosks, centralized data storage and around 50 franchises (kiosks).</p> <p>Rural entrepreneurs (village level accountants) would initially operate the kiosks and collect fees to become/ remain self-sustaining via this route, but this was ultimately not deemed to be feasible and while it is understood the individuals retained their roles, greater support/ oversight was provided by the PPP operators.</p> <p>The PPP was designed to provide support to the kiosks, and, implement 42 other e-governance services (including birth, death certificates, etc.)</p> <p>In 2008, urban 'Bhoomi' was tendered, and updates made to rural Bhoomi. This linked all sub-registrar offices and sought to make land data for some 200 lakh<sup>12</sup> (20 million) properties from 30,300 villages available online.</p> <p>Bhoomi has since been scaled up to 'urban Bhoomi'.</p> <p>Additional systems have been created, including Kaveri (document registration) and digital linkages to banks. In support of this, training was extended to bank employees with bank automation integration.</p>

<sup>9</sup>Bhoomi means 'land' in the Kannada language and is the name of the land records system that was established in Karnataka - <http://landrecords.karnataka.gov.in/service2/RTC.aspx>

<sup>10</sup>Indian rupee converted to \$ at the rate of 45 rupee to the \$ that applied in 2004.

<sup>11</sup>Administrative district. There are about 175 Taluks in the state of Karnataka which has an area of about 192,000 km<sup>2</sup> and had a population in 2011 of about 61 million.

<sup>12</sup>Unit in the Indian number system a lakh is equivalent to 100,000. 200 lakh is 20,000,000

No.	PPP Project Location	Land Administration Services	PPP Model and Financial Structure	Involved Parties	Main Features
5.	Stamps and Registration Information Technology Based Administration (SARITA) and i-SARITA: Maharashtra, India	<p><i>Services provided:</i> Digitize existing records, computerize the registration process.</p>	<p><i>PPP Model:</i> Build-Own-Transfer</p> <p><i>Financial Structure:</i> BOT model to facilitate implementation of SARITA and i-SARITA since a government-funded program was too expensive (costed at Rs 20 crore<sup>13</sup>, or ~\$4.4 million)<sup>14</sup>.</p> <p>SARITA was installed in all Sub Registration Offices (SROs) in 2002 under BOT contracts with 5 private companies. The BOT contracts were to run for 5 years and expire in February 2007.</p> <p>i-SARITA was similarly facilitated by BOT PPP contracts, becoming operational from 2011.</p> <p>Annual revenue collection ~\$1billion</p> <ul style="list-style-type: none"> <li>- Maximum rate of stamp duty is reduced to 5%</li> <li>- Process fee \$0.50 per page charged from the party &amp; approx. \$0.30 per page paid to BOT agency</li> <li>- Payments of \$11.25 million made to BOT vendors</li> <li>- Around \$8.75 million to government</li> </ul> <p>Maharashtra has significantly reduced the rate of stamp duty, reducing the maximum stamp duty from 10% to 5% over the past 4 years and reducing or rationalizing the stamp duty for capital and commodity market transactions. In the same period the fees, duties and taxes collected have gone from Rs 1,800 crore to Rs 4,000 crore (~\$396 million to \$880 million).</p>	<p><i>Public Sector:</i> Maharashtra State Department of Registration and Stamps National Informatics Centre (NIC) – developed the software Finance Department (Government Receipt and Accounting System)</p> <p><i>Private Sector:</i> SARITA: five vendors i-SARITA: two PPP vendors, M/s Consortium led by SM Computers and M/s. Vakrangee Software Limited.</p>	<p>SARITA Private companies were responsible for:</p> <ul style="list-style-type: none"> <li>- providing all necessary hardware, installing furniture based on a standard design and layout, providing consumables and installing the software system</li> <li>- providing the staff for data entry and on-going scanning of documents for registration (more sensitive elements of the registration process, such as document scrutiny, remained the role of the Sub-Registrar but all other clerical work was outsourced).</li> </ul> <p>SARITA ultimately reduced the registration process to 30 minutes, enabling the timely and efficient issuance of stamped copies of registered deeds. SARITA formed the basis for KAVERI (mentioned in Bhoomi case study), which was later implemented by the Center for Development of Advanced Computing (C-DAC).</p> <p>i-SARITA Extension of SARITA from digitization of data to computerization of the full registration process via a web-based application (developed by NIC) connecting the 480 SROs in the State of Maharashtra. All data collected during registration at any SRO would be saved to the central server.</p>

<sup>13</sup>Unit in the Indian number system a crore is equivalent to 10,000,000. 20 crore is 200,000,000.

<sup>14</sup>Indian rupee converted to \$ at the rate of 45 rupee to the \$ that applied in 2004.

No.	PPP Project Location	Land Administration Services	PPP Model and Financial Structure	Involved Parties	Main Features
6.	eLand (eTanah): Kuala Lumpur, Malaysia	Services provided: System development, eKadaster integration (planned), Document Management System, Infrastructure (Network and Data Center), Supporting Services (Single Window Searches, Online Payment, GIS, Business Process Management etc.)	<p><i>PPP Model:</i> Build-Maintain-Transfer (BMT)</p> <p><i>Financial Structure:</i> In 2013, the Cabinet decided that in-principle a private operator could implement e-Tanah in 9 states through a BMT PPP.</p> <ul style="list-style-type: none"> <li>- No upfront payment by Federal Govt for Kuala Lumpur Land Office (KL LO). No fees for first 2 years. Centralised Secured Land Databank (CSLDB)<sup>15</sup> fee of RM 1.25/title for years 3-7 (RM 0.75/title for years 8-14) and transaction fee of RM 4.50/title for years 3-7 (RM 2.50/title for years 8-14). Users do not pay for eTanah services, rather Federal Govt covers the cost.</li> <li>- System development took 2 years; the remaining 12 years are for support and maintenance to allow the private party to recoup i investment and make an ROI. After 14 years, system and technology transferred back to KL LO.</li> <li>- The total amount of payment that company can claim back is capped by the government. However, a cross subsidy was introduced to balance the losses of company's investment in certain states.</li> </ul>	<p><i>Public Sector:</i> Kuala Lumpur Land Office, Ministry of Water, Land and Natural Resources, UKAS (PPP Unit)</p> <p><i>Private Sector:</i> Operator - Puncak Tegar Sdn Bhd (PTSB)</p>	<p>Project Scope involves: system development, data management services, infrastructure provisioning, project management and maintenance, technology refresh (minimum twice in 12 years but also if needed to meet SLA), and technology transfer to Federal Govt.</p> <p>Single Window Search introduced with an integrated service for payments with searches for land titles, company profiles, and any bankruptcy</p> <p>System ownership with Federal Govt while data ownership is with State Govt</p> <p>Key legal reform included transition from paper-based to online integrated system</p> <p>50% increase in land revenue due to higher volume of transactions processed after implementation of eTanah</p>

<sup>15</sup>CSLDB is the digital version of the land database which encompasses all of the information of the land in a specific location.

The case studies for PPPs in land administration present several key takeaways, which have been used to inform the Operational Framework (Part II of the Knowledge Product on Public-Private Partnerships (PPPs) in Land Administration). In general, the following lessons learned should be carefully considered by practitioners considering the PPP modality:

- **Importance of Project Preparation:** To maximize the likelihood of success, projects should be prepared in accordance to the PPP Project Life Cycle. The appraisal and structuring stages are critical and necessary to inform the drafting of the contract, while the robustness of the contract, shaped during the drafting stage, will determine how project is implemented over the duration of the contract. It is critical to undertake the necessary activities and preparation at each stage to support the increased likelihood of overall success of the project. 'Shortcuts' or poorly managed stages can fundamentally expose the government to significant risks and heighten the potential for critical failures during implementation.
- **Roles and Responsibilities:** Fundamentally, the roles, responsibilities, and obligations allocated to the public and private partners critically impact the ease/possibility of implementation and overall likelihood of success of the project. The government should retain certain functions across transaction types (such as setting policy and the broader legal framework), while other services and responsibilities should be allocated to maximize efficiencies and optimize the overall viability of the transaction.
- **Risk Allocation:** As a general rule, risks should be allocated to the party best equipped to manage them. Risks should be clearly allocated, with due regard to mitigation measures. The identification and assessment of risks at the appraisal stage is critical to ensure they can be appropriately accounted for in the contract. A list of illustrative risks is presented in the Risk Reference Matrix (Part III of the Knowledge Product on Public-Private Partnerships (PPPs) in Land Administration).
- **Ownership of Data:** The contract must clearly define which party retains ownership and certain rights pertaining to data. This understanding must be explicitly and clearly included in the contract, with due reference to rights of use.
- **Potential for Sub-National PPPs:** The case studies demonstrate the significant potential for applying the PPP modality at the subnational level. Practitioners could consider options for these types of jurisdictions when identifying and conceptualizing projects and do not have to limit assessments to projects only on the national level.

### 3.5 Case Studies from Other Sectors

Since most land PPPs are tech-centric and are designed to improve public service delivery, this Analytical Framework considers case studies from e-Government PPPs as good comparators to be aware of. These e-Government PPPs also seek to improve public sector services by mobilizing private sector partners to digitize, modernize, and streamline functions and services. Some examples and key takeaways are presented in the following figure.

**AF Figure 4:** e-Government PPP case studies: Key Takeaways

Case Study	Key Takeaways
<p><b>Ghana: e-Ghana PPP</b></p>	<p><b>PPP Technical Focus and Driver</b></p> <ul style="list-style-type: none"> <li>• PPP introduced new and improved tax and business registration solutions and services in order to meet public needs and ensure compliance</li> </ul> <p><b>PPP Model:</b></p> <ul style="list-style-type: none"> <li>• Design-Finance-Build-Operate-Transfer</li> </ul> <p><b>Key Takeaways:</b></p> <ul style="list-style-type: none"> <li>• Strong engagement with stakeholders and a defined and committed communication strategy throughout the project (not just at the onset) enhances the likelihood of success for the PPP. For example, the consultative process for the PPP design for this project lasted over a year but ensured that the PPP met the needs of the partners and the public.</li> <li>• PPPs can be designed to protect future government revenue. For example, the cap at the total investment cost for this project ensured that additional revenues beyond investment recovery would revert to the public sector.</li> <li>• Tying risks related to payments to the private sector partner incentivizes optimal design and outcomes.</li> </ul>
<p><b>India: e-Seva PPP</b></p>	<p><b>PPP Technical Focus and Driver</b></p> <ul style="list-style-type: none"> <li>• PPP provided eGovernment one-stop shop for citizen and business services in order to induce savings in time and costs for citizens and businesses alike</li> </ul> <p><b>PPP Model:</b></p> <ul style="list-style-type: none"> <li>• Build-Own-Operate-Transfer</li> </ul> <p><b>Key Takeaways:</b></p> <ul style="list-style-type: none"> <li>• Centralized systems and front office solutions are often enhanced for public services when revenue is reliant on transactions, encouraging efficiency.</li> <li>• There can be substantial pushback and resistance by employees of traditional systems.</li> <li>• This case also has applications for sub-national PPPs, outlining key issues in designing sub-national PPPs; capacity and experience requirements; and the issue of lack of staff, lawyers, contract monitors, etc. compared to national level offices.</li> </ul>
<p><b>Singapore: TradeXchange</b></p>	<p><b>PPP Technical Focus and Driver</b></p> <ul style="list-style-type: none"> <li>• PPP providing a Trade Single Window solution, updating the previous TradeNet system with the TradeXchange platform to meet new demands</li> </ul> <p><b>PPP Model:</b></p> <ul style="list-style-type: none"> <li>• Design-Build-Operate-Transfer</li> </ul> <p><b>Key Takeaways:</b></p> <ul style="list-style-type: none"> <li>• The careful consideration and allocation of information ownership and intellectual property allowed for the effective execution of the TradeXchange contract without compromising either party's interests. The need to lay out the exact arrangements for these considerations is key to managing risks related to data and intellectual property ownership.</li> <li>• Careful and explicit outlining of ownership and usage rights for intellectual property and data in PPP contracts protects governments' abilities to retain critical information.</li> </ul>

# SECTION 4. FINANCING LAND PPPS

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# 04

The objective of this Section is to establish a clear framework in which the commercial case for Land PPPs may be established, focusing on the examination the expenses and revenue that may be expected in different LASs. Developing a suitable financial structure requires concerted modelling to determine critical project characteristics. This encompasses expected cash flow, primarily tied to revenue from user fees and/or government payments, as well as CAPEX and OPEX. Commercial feasibility, fiscal affordability, government debt and deficit assessments, and Value for Money (VfM) analyses inform this assessment. It should be noted the VfM analysis, which assesses the cost of delivering the same service through different approaches, does not necessarily capture situations where one approach provides significantly better socioeconomic or environmental benefits than other approaches.

Due consideration of sustainability and environmental, social, and governance (ESG) standards is increasingly becoming common as a supplementary analysis to VfM. This analysis is undertaken separately in the pre-feasibility and feasibility studies.

Commercial feasibility analysis is one of the most critical assessments as it encompasses revenue, expenditures, taxes, and investments, as well as the cost of loans and equity, insurance, and inflation. A PPP is generally considered commercially feasible when revenues exceed financial commitments generated by operational costs (e.g. maintenance, tax, and debt servicing) with the potential for return. However, in a PPP, revenues will always be determined by the payment mechanism adopted, particularly in circumstances where payment to the private operator fluctuates according to performance milestones. The Analytical Framework provides a detailed assessment of core considerations with respect to the structuring of PPPs as it relates to questions of project finance and payment mechanisms. In the context of LA services, the development of a land PPP would depend highly on the capacity of the LA system to generate revenues and the cost of running it.

#### 4.1 Land Administration System Operating Costs

The United Nations Human Settlement program has developed a report, called Costing and Financing Land Administration (CoFLAS), to help gather information on the costs (and revenues) of running (rather than developing) a LA system (LAS). Although CoFLAS draws on experience from economies with well-developed LAS, it was developed with the objective of addressing the requirements of LICs/MICs seeking to improve their LAS. **It is important to note that CoFLAS provides only indicative guidance and should only be used as a reference guide. Its data and estimates should not replace the project-specific due diligence of costs. The best cost information would be that collected from the land agency and related sources.** However, to demonstrate certain operating costs, CoFLAS estimates are used below to provide indicative examples using publicly available data.

The annual cost of running a LAS will depend upon several factors, including the scope of services provided by the LAS, the approach adopted in key legal and technical areas, the role of the various actors, particularly central government, local government and the private sector, and the extent that LA service delivery is decentralized.

The annual cost of running a LAS was investigated in preparing CoFLAS by gathering detailed information from 5 countries with well-developed LASs (Denmark, the Netherlands, New Zealand, Sweden and Thailand). In all five countries first registration was largely complete and there was an active land market. Four of the countries have a title registration system (the Netherlands has a deeds registration system). Cadastral surveys in Denmark and New Zealand are largely undertaken by the private sector, but are undertaken by government surveyors or local government in the other three countries. Strong ICT systems support the LAS in four of the countries, but the LAS in Thailand is largely maintained as a manual land records system.



CoFLAS sets out a process to cost the annual operating costs of a land administration system based on an estimate of the number of properties. This annual cost applies to a system where the registration is complete. Additional resources would be required to provide LA services in a jurisdiction where registration is incomplete. This analysis is less relevant in considering a Land PPP. As a Land PPP is most likely to be considered in the context of a private partner investing in the development of ICT and other systems to provide improved LA services some of the key production parameters that are documented in the CoFLAS report may be relevant. Key information from the CoFLAS report for countries with well-developed LAS is set out in the figure below.

**AF Figure 5:** Key Parameters from Countries with Well-Developed LAS (from CoFLAS, 2014).

Key Data	Denmark	Netherlands	New Zealand	Norway	Sweden	Thailand
Country Area (Wikipedia)	42,916	41,543	268,021	385,186	449,964	513,120
Population (Wikipedia)	5,602,536	16,788,973	4,468,200	5,063,709	9,555,893	66,720,153
Est. # of properties:	2,730,000	9,881,807	2,270,000	2,500,000	5,000,000	36,200,000
Registered properties:	2,730,000	9,881,807	2,114,000	2,500,000	4,933,274	34,607,150
Central agency LAS offices	3	7	3	1	77	459
Offices/10,000 sq km (country)	0.70	1.69	0.11	0.03	1.71	8.95
Registered Properties/Office	910,000	1,411,687	704,667	2,500,000	64,068	75,397
Annual Transactions/Office	684,333	93,140	206,396	-	76,201	15,440
Annual Transfers/Office	50,333	41,886	-	-	3,922	3,667
Total Staff/Office	80	255	62	550	11	2
Annual Transfers/ Registration Staff	1,258	598	-	-	1,007	358
Annual Transactions/ Registration Staff	17,108	1,331	9,382	-	19,558	1,506
Annual Transfers/ Registered Property	5.5%	3.0%	0.0%	NA	6.1%	4.9%
Annual Transactions/ Registered Property	75.2%	6.6%	29.3%	NA	118.9%	20.5%

## 4.2 Land Administration System Revenues

In most countries, land-related taxes, fees, and charges can be a significant source of government revenue, particularly for local governments. However, from the perspective of a land PPP, the Analytical Framework is concerned with the revenues that are linked to user-fee i.e. transaction-based fees and charges (i.e. taxes, fees and charges levied on transactions or LA services).

In many countries with a well-developed LAS, the fees and charges for registering property transactions can be a good source of revenue for government. In fact, many LASs can generate significantly more revenue than required expenditure for operations and maintenance. The schedule of fees and charges for the provision of land administration services in many well-developed LASs is often structured in

a manner that recovers from users the cost of service delivery. Often this arrangement recovers not only the direct cost of service provision, but also the provision of essential infrastructure such as the development and maintenance of ICT and records systems, physical occupation, and other operational costs for the agency maintaining the LAS.

The transaction-based revenue can be subject to market fluctuations with decreased activity and, therefore, decreased revenue when the land market is depressed in economic downturns, but increase revenue when the economy recovers. It is possible to forecast revenue based on existing and recent transaction histories. In preparing CoFLAS in 2014 the following observations were drawn from the LAS information in five economies (Denmark, Netherlands, New Zealand, Peru and Sweden):

- a. The property turnover (registered transfer as a percentage of total registered properties) ranged from 3.0% in the Netherlands to 6.1% in Sweden.
- b. The revenue from registered transfers as a percentage of total revenue ranged from 52.2% to 100% of revenue.
- c. The revenue from registered mortgages as a percentage of total revenue ranged from was 30.9% in the Netherlands (excluding survey and other revenue) to 37.4% in Sweden (excluding capital gain/stamp duty and other revenue).

This international experience provides some guidance in projecting revenue, but this needs to be tailored to the specific jurisdiction where a Land PPP might be considered. A key set of information in doing this will be the recent transaction records and revenue in the specific jurisdiction and sensitivity analysis will be necessary to assess the stability of revenues and the scope for increasing revenues.

It is also important to note that high transactions taxes, fees and charges can discourage participation in the formal system to register property transactions and foster difficulties as property owners seek to minimize costs by under-declaring property values or avoiding costs by transferring property through alternative means, such as irrevocable powers of attorney.

## ***Illustrative Private Sector and Government Costs for a Land Administration PPP***

### ***Private Sector Costs***

The specific costs of PPPs in land are context-specific and must be examined on a case-by-case basis. Many transactions, however, will involve certain capital expenditures (CAPEX) and operating expenditures (OPEX) costs, as outlined below.

#### CAPEX

The typical CAPEX costs often involved in PPPs in land administration include, but are not limited to, the following:

- **IT Solution:** The cost of the IT solution varies based on the specific jurisdiction needs, the needs of the land administration system, and the type of software solution (open-source or custom development). For example, the testing of the Operational Framework included IT solutions which ranged from a \$3 million estimate for a smaller jurisdiction to \$40 million for a large and complex jurisdiction. These costs were usually spread across a multi-year period (for example, a 5-year period with 2-year core development and 3-year system refinement).
- **IT Solution Refresh:** The cost of IT solution or technology refreshes must also be considered, with set refreshes at certain time junctures (for example, every 10 years). Depending on the broader context and solution in question, this could range from 50% of the initial development cost, up to around 65%.

- **Vehicles, Furniture, and Equipment:** The indicative cost for vehicles, furniture, and equipment can be estimated using the CoFLAS methodology and tailored to the local context of the target jurisdiction. The ability to streamline processes and subsequently reduce these costs through innovations and technology should be taken into account.

The largest cost usually incurred by the private sector is related to IT development, unless first registration is included under the roles and responsibilities of the private sector in the PPP structure. If first registration is included, these CAPEX costs related to first registration (e.g. field surveys) will be incurred by the private sector. While the cost of first registration can vary by local context and depends on the type of project (e.g. only remote data capture vs. field data capture, data cleaning, and entry into a land information system etc.), average estimates suggest that the cost of first registration tends to be between \$10 to \$60 per parcel.

### OPEX

The main OPEX costs falling under the private sector for PPPs in land administration include, but are not limited to, the following:

- **Staff:** The cost of staff is dependent on average salaries in the target jurisdiction.
- **Capacity Building:** Staff require regular capacity building and training to support operations. CoFLAS recommends applying a percentage of costs related to the reform, ranging from 3% to 15%. When assessing project concepts under the Operational Framework, an estimate of 5% of the annual staff costs may be used.
- **IT Solution Maintenance:** The annual maintenance costs for the IT solutions can be estimated at around 10 to 20% of the cost of the IT solution.
- **Office:** The cost of office space depends on the number of staff required, as well as the need for record archive space and other such requirements. CoFLAS recommends 10 square meters per person. Additional costs may need to be considered depending on the need for a paper/digital archive and/or a disaster recovery center. Costs can then be estimated for the tools using the average rental cost per square meter in the location in question. These costs may change if the office spaces are in purchased properties, as opposed to leased or rented properties.
- **Consumables:** The cost of consumables includes travel, travel expenses, vehicle expenses, field supplies, office supplies, computer consumables, equipment maintenance, and other such costs. These costs will be dependent on the scale of the project and specific context.

### **Government Costs**

The Government partner should also consider the costs which will be incurred on the public end throughout the duration of the project. These include the following:

- Project Management, Contract Management, and Monitoring & Evaluation (estimates using CoFLAS methodology range from 5% to 7%+)
- Communications (context-specific)
- Maintaining Legal Framework (context-specific)
- Dispute Resolution (context-specific)
- First Registration Costs (context-specific and if applicable)

### 4.3 Gaps in Funding and Financing Mechanisms for Land PPPs

Implementing a land administration regime that extends access and the benefits of the formal recognition of land rights to all is a critical economic development and pro-poor initiative. The challenge is identifying how to implement it. Targeted subsidies can be an effective alternative to ‘across-the-board’ subsidies in terms of ensuring that a project impacts the intended beneficiaries. However, past experiences from PPPs in the land sector provide limited information on the different categories of PPP funding.

Three primary categories of subsidies are presented below. In the context of land administration, an RBF approach that utilizes a one-off subsidy to broaden access to first-time registration presents a potentially viable model for PPPs in land administration.

**AF Figure 6:** Types of subsidies and approaches to subsidy targeting

Types of Subsidies	Approach to Subsidy Targeting
<p><b>One-off subsidies</b> A capital subsidy to provide access to a given service, most commonly for first connection or, in the case of land administration, first registration. Because RBF focuses on outputs, private parties may only receive the subsidy after a period of months of meeting set service delivery standards.</p>	<p><b>Self-Selection:</b> The funding of projects to support the delivery of basic services, usually in the health sector. Essential services hold greater appeal for the poor than the rich, which means poorer beneficiaries receive a higher share of the subsidies.</p>
<p><b>Traditional tariff subsidies</b> A subsidy with a defined timeframe to bridge perceived gaps between what a user is willing or able to pay and the cost-recovery requirements.</p>	<p><b>Geographic:</b> Tariff subsidies are most effective when marginalized communities are distinctly located in concentrated areas. However, they could be more complex when communities in different socio-economic strata are interspersed.</p> <p><b>Means-testing:</b> Requires calculation of an individual’s wealth to determine their eligibility for a subsidy. This necessitates advanced administrative systems for access to sufficiently detailed data on the public to make means-testing determinations, even just based on proxy assessments.</p>
<p><b>Ongoing subsidies</b> A subsidy to remedy a continuous gap between affordability and cost recovery, usually as a result of high access costs for public utilities or services.<sup>16</sup></p>	<p><b>Community-based:</b> Engagement with community leaders to collaboratively identify those most in need of access to a service. This is time-intensive, and there is potential for the abuse of the selection process.</p>

<sup>16</sup>Y. Mumssen et al., *Output-Based Aid: Lessons Learned and Best Practices* (2010), pages 18-19 and 103-104  
<http://documents.worldbank.org/curated/en/206041468337170198/pdf/536440PUB0outp101Official0Use0Only1.pdf>

In some cases, governments or donors may provide viability gap funding to increase the financial viability of a project. This funding can be in the form of a capital grant or subsidy and can be tied to certain provisions in the project contract or structure. This funding can also reduce the investment requirement by financiers and the private party, enabling for a lower cost to be passed along to the user.

The question of payment mechanism and project financing merits further exploration, particularly in the context of RBF (including results-based aid) and the potential for the funding of land administration systems under PPP. The utilization of financial incentives is a hallmark of RBF approaches, which typically target access to basic services for the broader population rather than those directly affected by an asset.

In an RBF project, the subsidy is typically designed to complement or to replace usage fees, serving the dual purpose of easing the costs of service access and enabling access for more 'financially-risky' population demographics. Such approaches have been used successfully throughout Central and South America. For example, for the Rural Electricity Access with Small-Scale Providers Initiative in Bolivia, electricity service providers were engaged under an RBF agreement to increase affordable access to power in isolated rural areas. The subsidy structure adopted enabled almost 6,000 of the poorest households in the target areas to gain access to systems lighting and basic ICT services.

Furthermore, a recently approved World Bank project in the West Bank supported by GPRBA, is applying a results-based subsidy that is linked to the targets of systematic first registration set by the local land agency and securing women's property rights in the process. The subsidy is set a fixed amount per title and is designed to be disbursed once a threshold of a pre-agreed number of titles have been delivered in a pre-agreed time frame.

Moreover, an ancillary benefit of using RBF approaches is that the PPP contract can require the private party to meet certain levels of quality of services, tying payments or incentives to the meeting of such standards. For example, payments can be structured to be contingent on set standards of quality in the delivery of services or clauses in the agreement can stipulate the early termination of the contract in cases of low performance.

While RBF approaches rely on the availability of grants or concessional public financing for viability, their attraction and performance-based structure make them attractive to governments, donors, investors, and consumers alike.

Nevertheless, one challenge of RBF can be the lack of experience and familiarity that many governments have, which may limit mechanism design and effective monitoring and enforcement.

## Considerations For Regulating User Fees

Depending on the context, the issue of regulating user fees may be a critical one to address. While private sector operators will seek fees that demonstrate a higher commercial viability, governments must consider the affordability and ability to pay of the general public (users). As a regulatory responsibility, the setting of fees would remain under the government as a retained function. The frequency and process for adjusting such fees, however, should be addressed in the agreement so the private sector has an understanding on how this critical element can impact the commercial viability of the transaction over the life of the project. To a certain extent, the process should allow for public-private dialogue to inform the adjustments, but overall the process should be driven by willingness-to-pay and ability-to-pay assessments by the government or a third party. **The government must ensure the final fee structure meets the public's needs and that services remain accessible and affordable to the public. It is important to note that the level of fees should be such that it does not suppress the demand for the formal transaction process.**

### 4.4 Proposals for Payment Mechanisms in Land PPPs

Although revenue sources are commonly broken down into user-pays and government-pays models, PPPs typically include some, or all, of the following core elements:

- **User Charges** - Payment collected through a Special Purpose Vehicle (SPV) from users requires specific consideration for tariff setting and adjustment. For example, ARI, the Operator of the NSW LPI, collects and retains transaction fees directly from customers. It should be noted that ARI also collects, and passes to government, transaction levies for the Torrens Assurance Fund. This mechanism can be structured with certain caps or other similar structures to allow for revenue sharing between the contractual parties.
- **Government Payment** - Payment for services or assets provided based on availability (dependent on meeting certain standards or milestones leading to and maintaining operation of asset), and subsidies. For example, the operator of the e-Tanah concession in Kuala Lumpur, Malaysia has a transaction-based payment schedule in place with Government. Citizens do not lodge fees with the operator directly. The level of fees payable reduces over the life of the concession, which would also align with a reduced level of expenditure being required on the operator's side in terms of system development and rollout.

Both payment mechanisms can include bonuses, penalties, or fines to ensure the meeting of certain milestones and targets. Revenue stemming from Value-Added Services and the use of data may also be considered when designing payment mechanisms.

In the context of land administration and as noted above, an alternative to project funding and revenue generation through user-pays arrangements is the use of availability payments. Such a payment mechanism requires that the private partner provide and administer infrastructure for public authorities. Compensation for this is provided through regular payments based on the level and, depending on the terms, quality of service. Land administration PPP payments can also take the form of a fixed capacity payment (unlinked to the number of service transactions) or a variable payment linked to the actual number of transactions. In land administration, this could occur in a contract to build, manage, and finance property registration in defined areas, which would be compensated using an availability payment per transaction to cover the total project cost – including financing and investor returns. This approach has been adopted in other countries for public infrastructure and services, for instance,

health, motor vehicle registration, ICT facilities, and more traditional tolled facilities such as roads. The standard PPP payment mechanisms listed above may not be sufficient to make a PPP viable and there may be a need for viability gap funding that could be provided by development partners.

However, in countries with land administration systems in their nascent stages, the collection of land administration service fees is often very challenging – particularly where a culture of formal land registration has not been established – and revenue generation from user payments may be seen as a payment risk by the private sector (particularly by the institutions providing finance). Consequently, availability payments may provide better options for exploration in terms of reducing private party risk and promoting social benefits, such as pro-poor accessibility.

In countries with less well-developed LAS, procedures to record rights are often incomplete in terms of geographic coverage and information datasets. For example, by some estimates, less than 5 percent of properties are registered in the formal LAS in many Sub-Saharan African countries. These incomplete records make it impossible to assess/estimate recovering the cost of land services from user fees and charges in a manner that is not a major barrier for participation in the formal system, particularly for the poor and vulnerable. The lack of coverage can pose challenges for the private operator, who will likely need a healthy volume of transactions and a certain fee level in order to recoup costs and make a return on its investment.

In some countries, land administration services are provided at a sub-national level or jurisdiction. If records are complete or near complete in a jurisdiction, a Land PPP at that jurisdiction level may be a viable option.

Another model that could be considered is building a complete register on a transaction basis, where the PPP operator provides the platform for registration and a system that requires all new registrations to be entered by the operator into the new system. This would be structured on the basis that the applicant submits all the information necessary, which may include an accurate cadastral survey, for first registration.

Each of the Land PPPs documented in the Analytical Framework are structured with the private operator providing services in return for a share of the transaction-based fees and charges. In some unsolicited proposals (USPs), there have been discussions of a PPP arrangement based on a percentage share of property tax collection. In these cases, the private operator has proposed improved property tax collection by investing in aspects, such as improved property tax maps, tax rolls, tax assessment, and tax collection in return for some share of the increased tax revenue. However, the evidence remains anecdotal and none of these opportunities have advanced to a stage where the experience can be assessed. Given that property taxes are typically a local government revenue, it is important to be aware that any such proposal would require internal discussions within the country to understand whether it is possible, feasible, or even desired to divert property tax revenues as a potential payment mechanism for a land PPP. Given the complexity of this issue, the Analytical Framework does not explore it in detail, but simply notes it for the information of governments and development partners.

Figure 7 below provides a succinct breakdown of the minimum requirements for core Financial Viability Assessments, as well as various Payment Mechanisms available when structuring projects.

**AF Figure 7: Minimum Requirements to Establish a Commercial Case for Land PPPs**

Thematic Areas	Minimum Requirements
<b>Financial Viability Assessments</b>	
<b>Commercial Feasibility (Bankability)</b>	Examine all expected project revenues as compared against costs (operation, maintenance, taxes, service debt, payback invested equity) to establish private sector attractiveness.
<b>Economic Feasibility</b>	Evaluate whether socioeconomic benefits to society exceed the economic costs of a project, accounting for both positive and negative externalities. This includes a cost-effectiveness analysis to establish whether the project is in fact the lowest-cost approach to securing the intended economic benefits.
<b>Fiscal Affordability</b>	Analyze both direct and contingent costs, meaning those payments that are required to the private operator (government-pays) as well as those payments that are conditional on specific performance output indicators.
<b>Value for Money (VfM)</b>	Combination of qualitative and quantitative assessments. The former is targeted at determining soundness of project structuring and whether it will attract private sector interest and create market competition in tender. The latter is typically achieved using a Public Sector Comparator (PSC) where the fiscal implications of the proposed PPP model are compared against that of traditional procurement methods.
<b>Sensitivity Analysis</b>	Test the accuracy of the VfM assessment, as well as its sensitivity to certain assumptions related to PSC cost projections, cost overruns, revenue, the discount rate for Net Present Value (NPV) calculations, and so on.
<b>Payment Mechanisms</b>	
<b>User-Pays</b>	<p>Revenue generated by a certain number of transactions by users of the asset or service must be sufficient to cover all the costs of operation and maintenance.</p> <p>This payment mechanism can include certain caps, where revenue above a pre-determined level reverts to the government, in order to allow for revenue-sharing. Similarly, this mechanism can be structured so the government retains a certain percentage or share of the revenue. This can be introduced when revenues reach a certain figure or be applied in general to the total amount of revenue generated. Specific details should be clearly and explicitly defined in the PPP Agreement.</p>
<b>Availability Payments</b>	Private operators can be remunerated through regular payments based on the level and, depending on the terms, quality of service, to either supplement or supplant transaction fees where user-pays arrangements do not generate sufficient revenue to support commercial viability.
<b>Results-Based Financing (RBF)</b>	<p>Payments can be tied to the performance of the private sector, essentially linking remuneration with the meeting of certain milestones or standards.</p> <p>RBF schemes can also be used to incentivize service delivery in poorer areas through de-risking by donors like the World Bank.</p>
<b>Subsidies</b>	<p>To support project viability, targeted subsidies (self-selection, geographic, means-testing or community-based) can be an effective mechanism to ensure a project impacts the intended beneficiaries. Relevant subsidy structures include:</p> <ul style="list-style-type: none"> <li>• <b>One-Off Subsidies:</b> provide access to a given service, most commonly for first connection or, in land administration, first registration.</li> <li>• <b>Traditional tariff subsidies:</b> to bridge perceived gaps between what a user is willing or able to pay and cost-recovery requirements.</li> <li>• <b>Ongoing subsidies:</b> to remedy a continuous gap between affordability and cost recovery resulting from high service costs.</li> </ul>



**SECTION 5.  
KEY CONSIDERATIONS  
AND MINIMUM  
REQUIREMENTS**

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**05**

Section 4 draws on the analysis of previous experience with PPPs, particularly in the land sector, to set out key considerations for a land PPP, the minimum requirements for a land PPP, and the steps that a LICs/MICs could take to prepare for a land PPP.

## 5.1 Key Considerations in Developing a Concept for a Land PPP

There are several key considerations pertinent to the creation and implementation of PPPs in land administration.

**AF Figure 8: Key Considerations**

Gap	Considerations
<b>Capacity</b>	If a government is new to managing and overseeing PPP identification, appraisal, structuring, implementation, and management processes, external advice and capacity building should be sought. Interested countries can approach development partners to retain a technical advisor to guide the transaction from inception to completion. External support, however, needs to be complemented with a concerted capacity-building effort within the relevant PPP and/or land sector agencies in the country.
<b>Barriers</b>	Each individual country and project concept must be examined on a case-by-case basis to assess existing barriers to PPP and those specific to the land administration sector. Barriers will differ according to services provided, PPP models and structures adopted, entry points, existing legislative framework, etc. Historical factors may also play a role.
<b>Risks</b>	Risk analysis and its management are fundamental to PPP feasibility. Critical to risk management is the allocation of risk to the party best equipped to mitigate and/or deal with the aftermath. Risks to PPPs in land administration must be identified, and mitigation and management practices agreed to and clearly established.
<b>Pro-Poor Considerations</b>	PPPs for land administration in low- and middle-income countries are likely to require project structuring with due consideration of pro-poor concerns. However, existing cases may not identify best practice pro-poor initiatives, limiting available knowledge. Furthermore, in order to expand service delivery to poor areas, mechanisms like RBF may be used.
<b>Customary Land<sup>17</sup> and PPPs</b>	<p>Experiences in land administration reform projects have demonstrated that dealing with customary land systems is complex. Currently, none of the land PPP projects studied have been applied directly to a customary tenure setting. That is not to suggest that activities for the formalization of customary land systems should be conducted outside the roles of a private concessionaire. One potential risk of PPPs in land administration in the context of customary land is the creation of a two-tiered legal system and investment environment, which may pose a challenge to the broader investment environment and social needs.</p> <p>Due to the sensitivities surrounding customary tenure and the closely associated social, economic, and cultural aspects of customary groups, an extra degree of caution and scrutiny should be applied when considering land administration in these settings. As with any potential land PPP, opportunities in customary tenure settings will be very much context specific for each individual jurisdiction. As a potential starting point, government-subsidized opportunities for customary tenure environments might exist for outsourced technology and transaction processing services. This could be particularly relevant in those countries where multiple customary groups have a high degree of similarity in their approaches to land administration, which would drive economies of scale in solution design and make such transactions more financially viable. In any case, customary rights need to be identified, and the nature of the relationship between customary norms and contemporary statutory laws must be legislatively defined prior to PPP implementation. PPPs in these cases will require additional rigour in the pre-feasibility assessment.</p>

<sup>17</sup>Customary land systems are common in most LICs/MICs and refer to community arrangements, outside the overall legal system, for land rights. Common examples are the allocation of land resources by tribe chiefs or community land holdings under religious laws. In the context of indigenous groups, it is worth considering alternatives to formal land titling programs that include the political and legal recognition of customary land rights.

Gap	Considerations
<b>Guarantor of Land Tenure Security and Land Market Transactions</b>	<p>The structuring of a PPP in land administration should take into consideration the need to clearly define a guarantor of property rights as well as the transactions being conducted under the new environment. Examples from Australia, Canada, South Africa, and the USA provide illustrative models thanks to the placement of the onus on the state, the private sector, or industry players. Subsequently, the following issues should be considered when defining such a role:</p> <ul style="list-style-type: none"> <li>• Public guarantees can be provided for all land transactions under public sector responsibilities and roles in the PPP contract. The government must ensure the fiscal foundations are in place for this and must have a well-established system in place to efficiently and transparently handle issues (through legal or procedural reform).</li> <li>• Legislative and regulatory reform within the land framework prior to the PPP, requiring the introduction of some form of insurance to protect all parties transacting within the system. Depending on the model adopted, and how it's communicated, this may receive some resistance from affected stakeholders due to increased costs.</li> <li>• If the system involves professional lawyers and surveyors with required professional indemnity insurance, this could form the basis for some level of guarantee or avenue for compensation for injured parties whose rights have been negatively impacted by fraudulent or erroneous actions (similar to that in effect in South Africa).</li> </ul>
<b>Hidden Costs</b>	<p>When developing PPPs for land administration, governments need to ensure that the management of "transaction costs" and other "hidden costs" are transparently understood, recognized, and allocated before a transaction is approved. Most of these costs are part of the process of mobilizing finance and developing large investments for the private sector provision of a service. In the first instance, it is essential that a transparent and competitive bidding basis is adopted as a first step toward minimizing costs and maximizing transparency.</p> <p>It is also important to be mindful of "hidden costs". Typical hidden costs from e-Government PPPs and other public service infrastructure include costs of administration (development, feasibility, regulation); the fees paid to appropriate technical, legal, probity, ICT, and financial advisors (feasibility and transaction); the costs of awarding and amending contracts (costs of procurement); costs of misaligned incentives (cost overruns, penalties, delays, etc.); the cost of overpayment or procurement issues (government change orders, etc.); and the cost of financing and or availability payments. Once land administration PPPs become more standardized and mainstreamed, these 'hidden' costs may become more known and predictable. In the interim, careful planning and projections will be needed. The preparation process should, therefore, include thorough pre-feasibility and feasibility studies, sound financial structuring, and committed contract oversight from the public partner.</p>
<b>Sub-national PPPs</b>	<p>When considering sub-national PPPs in land administration, governments must establish defined strategies and policies for enforcing standardization and avoiding the duplication of efforts from the project's onset. Such projects require detailed pre-feasibility and feasibility studies to assess whether the approaches meet overarching objectives for land administration on a national level and if such approaches make better sense than a coordinated national-level initiative. Sub-national PPPs should have clearly defined scale-up plans and/or clear reasons for adopting a sub-national approach.</p>

## 5.2 Minimum Requirements

The following figure presents the minimum requirements for countries to consider a land PPP concept.

**AF Figure 9:** Identification of Minimum Requirements for Land PPPs

Theme	Minimum Requirements for a Land PPP
<b>Legal, Regulatory, and Institutional Framework</b>	
<b>Legal</b>	<ul style="list-style-type: none"> <li>A PPP Act or Law (or equivalent legislation) should be in place for the successful implementation of PPPs in land administration. Land administration (LA) legislation may require amendments in accordance with the PPP model adopted for a project to accommodate the new structure or technical aspects of the land administration system. For example, classification and/or caps for transaction product and service fees/tariffs set in the law may hamper the financial viability of a PPP transaction and may, therefore, need to be revisited.</li> <li>An established system of guarantees for transactions in the LA systems in such way that bounded responsibility and certainty is provided to LA operators. Guarantees could be provided based on professional liability insurance of those professionals involved in the transactions, for example.</li> </ul>
<b>Regulatory</b>	<ul style="list-style-type: none"> <li>Defined and well-established PPP Regulations or Guidelines, in support of an overarching PPP Act or Law (or equivalent), are often needed. These will facilitate the successful introduction of PPPs in land administration. In many cases, specific regulations for the PPP project should be in place before the project can begin (e.g. delegation of functions from public sector to private sector, use of digital signatures etc.).</li> </ul>
<b>Institutional</b>	<ul style="list-style-type: none"> <li>An established and well-defined institutional structure that clearly delineates the roles and responsibilities of the involved government agencies and ministries for the PPP (the land entity line ministry and the procuring entity responsible for PPPs) as well as the private sector is needed. This will facilitate the successful implementation of PPPs in land administration.</li> <li>A positive engagement with industry stakeholders (land surveying professionals, practising lawyers etc.) around their market role in PPP future scenarios.</li> </ul>
<b>Project Life Cycle</b>	
<b>Project Planning and Identification</b>	<ul style="list-style-type: none"> <li>Committed resources and time for identifying, screening, and prioritizing PPPs in land administration to ensure the project concept meets national priorities, objectives, and the public interest. Development partner support may be sought in order to fund pre-feasibility or feasibility studies or other project identification and planning exercises.</li> <li>An established marketing and communication strategy for continued engagement through the duration of the contract. This is especially pertinent in those instances where the PPP transactions may include systematic titling, formalization, and registration, or the requirements for conducting land transactions has fundamentally changed.</li> </ul>
<b>Project Appraisal and Preparation</b>	<ul style="list-style-type: none"> <li>Detailed financial modelling including pre-feasibility and feasibility studies, financial and VfM analyses, and risk analysis to appraise identified PPPs in land administration and assess project viability. LICs/MICs could seek donor or other assistance in funding such exercises.</li> <li>Completed scoping and market analysis to assess and foster private sector interest at an early stage.</li> </ul>
<b>Project Structuring</b>	<ul style="list-style-type: none"> <li>Identified PPP model which clearly lays out the roles, responsibilities, obligations, and rights of the public and private parties. Pre-feasibility and feasibility studies will enable Governments to confirm the appropriate structure.</li> </ul>

Best Practice Theme	Minimum Requirements for a Land PPP
<b>Project Procurement &amp; Implementation</b>	<ul style="list-style-type: none"> <li>• Transparent and well-defined procurement processes to minimize corruption and political intervention in projects. This will lead to the selection of the best partner for the PPP and a heightened likelihood of success during implementation.</li> </ul>
<b>Project Contract and Management</b>	<ul style="list-style-type: none"> <li>• Detailed contracts for PPPs in land administration that clearly define respective roles, responsibilities, obligations, performance measures, milestones, incentives and penalties, and expectations for private and public sector partners.</li> <li>• Identified contractual provisions addressing pro-poor and vulnerable group (e.g. women) accessibility of key services and functions.</li> </ul>
<b>PPP Technical Structuring</b>	<ul style="list-style-type: none"> <li>• A degree of flexibility should be built into the PPP contract to accommodate long-term macro changes (such as financial system shifts or crises) and unforeseen risks.</li> <li>• Land administration PPPs proposal must explicitly address the ownership of intellectual property and data, with the understanding that the government should consider retaining ownership of key information to allow for critical public sector use of data.</li> <li>• The technical structure should promote value-added services for users to increase revenue, innovation, and client or customer usage or registration.</li> </ul>
<b>PPP Financial Structure</b>	<ul style="list-style-type: none"> <li>• Careful financial design, with a considered financial model based on the results of financial modelling in the pre-feasibility and feasibility studies, to ensure the project makes financial sense for both the government and private sector partners.</li> </ul>
<b><i>Public and Private Roles and Responsibilities</i></b>	
<b>Government</b>	<ul style="list-style-type: none"> <li>• A strong political will with a clearly assigned leading entity to guide and support the PPP throughout the project life cycle.</li> <li>• Identified mitigation initiatives to pre-empt and reduce resistance to reforms or new services that the PPP introduces in land administration.</li> </ul>
<b>Private Sector</b>	<ul style="list-style-type: none"> <li>• There should be a demonstrated private sector appetite for the project.</li> <li>• This interest can be confirmed through market assessments and scoping to assess private sector interest in the land PPP concept.</li> </ul>
<b>Other Parties</b>	<ul style="list-style-type: none"> <li>• Retain external technical advisors (such as legal (for contract drafting and negotiation), probity, tax, financial, accounting, economic forecasting, commercialization advisory, and ICT advisors) to support and guide the PPP in land administration transactions from inception to close.</li> </ul>

### 5.3 Low- and Middle-Income Country Strategies for Preparing for a Land PPP

Several successful land administration PPP case studies have been from high-income countries. This has created a knowledge gap regarding limitations and strategies to mitigate contextual realities in low- and middle-income nations. While the guiding principles remain the same for all jurisdictions, LICs/MICs face varying limitations when implementing PPPs in land administration that high-income countries may not. These are mostly related to differences in available resources and governmental capacity. The figure below identifies the limitations low- and middle-income countries may face alongside possible intervention strategies.

**AF Figure 10:** Considerations for LICs/MICs and Possible Intervention Strategies

Consideration	Possible Intervention Strategy
<b>Limited financing</b>	Mobilize private financing and leverage using PPPs, RBF techniques, and blended finance. For example, development partners could provide viability gap funding to increase the financial viability of a project.
<b>Lack of resources for project appraisal and preparation</b>	Engage with development partners like World Bank, IFC and MCC to receive funding and technical assistance for pre-feasibility and feasibility studies. The Operational Framework offers an initial Readiness Assessment (RA), Land PPP Conceptualization Tool, and a Concept Viability Analysis (CVA) for rapid, early-stage assessments.
<b>Uncertain political support</b>	Nominate a champion to guide and support the project concept and introduce public awareness and communication campaigns and strategies.
<b>Lack of organizational capacity for transaction execution and oversight</b>	Designate a single agency as the leading point of contact/champion for the transaction, including the creation of a transaction Steering Committee comprising relevant government representatives (e.g. Land agency, Finance, Treasury, Justice). Engage external advisory support as necessary for transaction execution and operational oversight, e.g. probity, IT, legal counsel, commercial advisory services.
<b>Gaps in existing legal framework</b>	Undertake legislative reform, focusing on the PPP framework and land administration framework, drawing from international best practices and advisory support. Piloting options that permit flexibility in the regulatory framework might be needed to allow proper fit-for-purpose (FFP) strategies. Collaboration between the regulator and a potential operator could test these strategies through a hybrid contracting and financing approach. This could see the initial testing phase (6 months – 2 years) performed using a standard fee for service model, which then reverts to a traditional concessional deed for the long-term PPP transaction. In such scenarios of phased contracting, attention should be paid to clear conditions precedent to be met before moving from one phase to the next.
<b>Liability</b>	Introduce provisions in PPP contract to limit liability and address the need for a state guarantee in the legal reforms. This has been a success in Australia, where all transactions remain under the protection of the State even if the Concessionaire processes them.
<b>Commercial competition, fees, and charges</b>	Introduce provisions in the PPP contract, based on the findings of the feasibility study, in order to ensure excessive fees or charges are not passed along to the users.
<b>Data protection, privacy, and access to data</b>	Embed data protection, privacy, and access to data provisions in PPP contract, ensuring that the textual and spatial datasets relevant to other critical government functions (emergency services, police, etc.) are readily available at no cost, and that existing public access via commercial or other arrangements are maintained.
<b>Quality control and management</b>	Introduce performance standards, and tie payments to performance as part of the RBF approach within a PPP. For this, strong strategies to enable FFP are fundamental.
<b>Education and Training</b>	Require private sector partner to include training and public engagement as part of the scope in the PPP contract at all stages, particularly for those likely to have tasks that entail supervising the system.
<b>Public sector employee considerations</b>	In those scenarios where this is low capacity or limited resources, mobilize private sector participation to supplement or replace public sector staff.  In those instances where a considerable cadre of public sector staff may be displaced through the application of technology, business process outsourcing, or efficiencies gained through procedural reform, examine options for minimum periods of employment guarantees or redeployment within other government agencies. These options could be supplemented with re-training and additional capacity building measures.



# OPERATIONAL FRAMEWORK

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Part II of PPPs in Land Administration

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# ABBREVIATIONS

BOO	Build-Own-Operate
BOT	Build-Operate-Transfer
BOOT	Build-Own-Operate-Transfer
BTO	Build-Transfer-Operate
CBA	Cost Benefit Analysis
CoFLAS	Costing and Financing Land Administration Services
CVA	Concept Viability Analysis
DBFO	Design-Build-Finance-Operate
DBFOM	Design-Build-Finance-Operate-Maintain
DBFOT	Design-Build-Finance-Operate-Transfer (Construction)
DCMF	Design-Construct-Manage-Finance
EBRD	European Bank for Reconstruction and Development
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
IDB	Inter-American Development Bank
LA	Land Administration
LAS	Land Administration System
LDO	Lease-Develop-Operate
LGAF	Land Governance Assessment Framework
MCC	Millennium Challenge Corporation
MFD	Maximizing Finance for Development
NSW	New South Wales
O&M	Operations and Maintenance
PFI	Private Finance Initiative
PPP	Public Private Partnerships
PSC	Public Sector Comparator
RA	Readiness Assessment
RBF	Results-Based Financing
ROI	Return on Investment
ROT	Rehabilitate-Operate-Transfer
SDG	Sustainable Development Goals
VfM	Value-for-Money
WBG	World Bank Group

# SECTION 1.

## OVERVIEW OF THE ASSESSMENT TOOLKIT AND APPROACHES FOR APPLICATION

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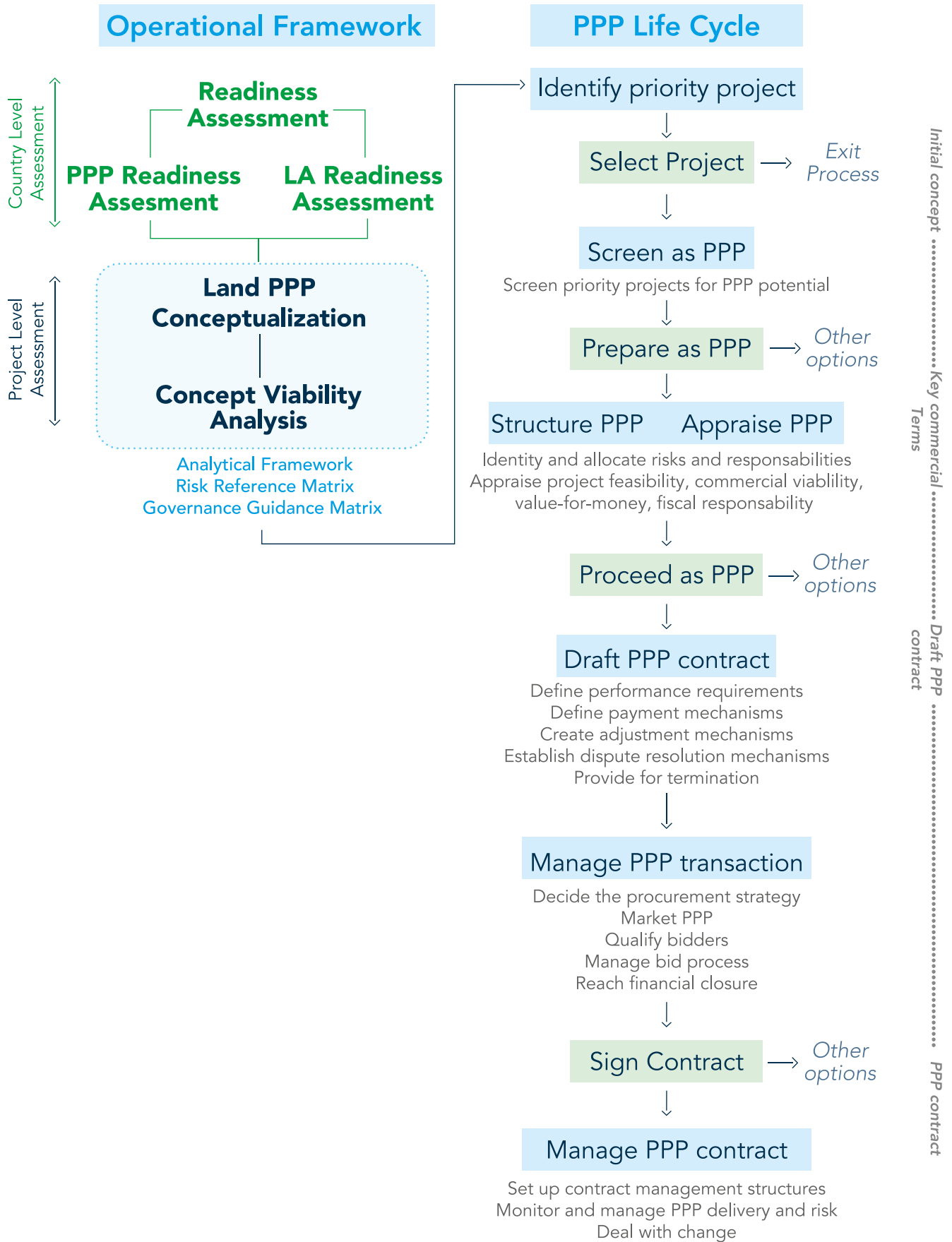
# 01

## 1.1 Objectives for the Operational Framework

This is the Operational Framework, Part II of the Knowledge Product on Public-Private Partnerships (PPPs) in Land Administration. This Operational Framework (OF) is an early-stage assessment toolkit for government agencies (land agencies and PPP units or other such institutions charged with coordinating PPPs) and development partners to use when evaluating the suitability of pursuing a PPP approach in the provision of land administration (LA) services i.e. a “Land PPP”).

The OF specifically allows users to undertake the following: (a) test country-level readiness; (b) identify a land PPP concept; and (c) complete a rapid early-stage assessment to look at the concept viability. Therefore, it should be noted that the OF and its toolkit are not intended as a replacement for the screening and due diligence that takes place in the PPP Life Cycle. Rather, it is intended to support governments and development partners in assessing a PPP scheme as a possible option for the delivery of land administration, as well as supporting the examination of donor engagement through results-based financing or viability gap funding. The OF and its toolkit, therefore, allow governments and donors to undertake the identification stage, which is the first step of the PPP lifecycle. The results of the OF will support the identification of a project concept, which will then proceed through the selection, preparation, appraisal, and other later-stage phases of project development. There are many well-developed resources to support project concept architects and implementers that have been published by the World Bank Group (WBG) and other institutions. Utilization of standard PPP assessment methodologies, including pre-feasibility and feasibility studies, remain essential and are a part of the PPP Life Cycle. Refer to OF Figure 1 to see how the OF and its tools flow into the PPP Life Cycle.

**OF Figure 1:** Situating the Land PPP Operational Framework in the PPP Lifecycle



## 1.2 Structure of Operational Framework

The OF tools can be used in a relatively short period of time, combining a desk review with 1 to 2 validation missions. The results can be obtained quickly and allow for strategic decision-making. It should be noted that the quality of the OF recommendations and the time it takes to conduct the assessment depend on external factors, such as availability and quality of market data. The OF is not a one-size-fits-all tool as it depends on the quality of data and any potential biases of the users applying the tools. While the OF presents scoring mechanisms, it is important to note that there may sometimes be political pressures to score parameters favorably, especially if it is a self-assessment. Therefore, the results should be interpreted with some discretion.

The OF consists of three tools and two reference documents. The three tools are:

1. **The Readiness Assessment (RA) Tool** establishes a national or sub-national jurisdiction's readiness for a Land PPP and allows users to conduct an initial assessment of the enabling environment and macro-level readiness of a country or jurisdiction to pursue a PPP project concept within land administration. The RA consists of two assessments: the PPP Readiness Assessment (PPP RA) and the Land Administration Readiness Assessment (LA RA).<sup>1</sup> As previously mentioned, the quality of the OF and its recommendations depend on the quality of data inputs. Some countries or jurisdictions may have land market assessments (LMAs), which would be a key input in developing the LA RA. However, data gaps and data quality issues may restrict the ability to conduct a meaningful assessment. In order to overcome such a situation, the LA RA also relies on existing land sector analysis tools (such as the Land Governance Assessment Framework (LGAF) and the Doing Business index for Registering Property). The use of existing reports also allows for a rapid assessment to be done. Similarly, the PPP RA relies on existing country-level assessment tools for PPPs (such as the United Nation PPPs Readiness Assessment and the World Bank PPP Country Readiness Diagnostic). Where such reports do not exist, the user can consider applying the report methodology as appropriate to conduct an independent or self-assessment and address gaps in information or data. The scorecards and tools have been designed in order to allow for a rapid identification of the key impediments to readiness, allowing for governments to determine a 'direction of travel' on a reform pathway. Certain illustrative pre-determined thresholds are recommended. If a jurisdiction meets the thresholds, the tool user would be able to conduct a deeper analysis by applying the Land PPP Conceptualization Tool. If the threshold is not met, the assessment scorecards can be used as a preliminary diagnostic tool to identify key issues in the land administration and PPP spheres that could be considered in a government-led or donor-supported reform program. Governments or donors may then use the RA to return and re-evaluate a target jurisdiction to assess the readiness for a land PPP project concept.
2. The **Land PPP Project Conceptualization Tool** provides a framework to develop or assess a Land PPP project concept, where the project can be defined as a product or service that is being considered for procurement through a PPP scheme. The Land PPP Conceptualization Tool has been designed to validate any existing project concept for a Land PPP and/or provide a framework to develop such a project concept. The tool helps develop an early understanding of how the PPP may be structured, prepared, and implemented. The tool collects and structures the information necessary for the Concept Viability Analysis. Whenever possible, the Land PPP project concept should be validated with relevant stakeholders. Further details are presented in Section 1.3 on the team composition.

<sup>1</sup>When considering sub-national PPPs, users should use the sub-national addendum of the PPP RA. As land administration services are delivered at the sub-national level in many countries, the same LA RA can be used for assessing readiness for a Land PPP at the sub-national level.

3. The **Concept Viability Analysis (CVA)** is used to assess the initial viability of a Land PPP project concept. The CVA is based on five cases to preliminarily assess the viability of the land PPP project concept. Each case, which is vital to the viability of the project concept, contains a list of questions to help users consider the key factors guiding the project concept's success at this early stage. The CVA can be undertaken by the two specialists (land and PPP), with much of the LA information required for the CVA being captured in the preparation of the LA RA.

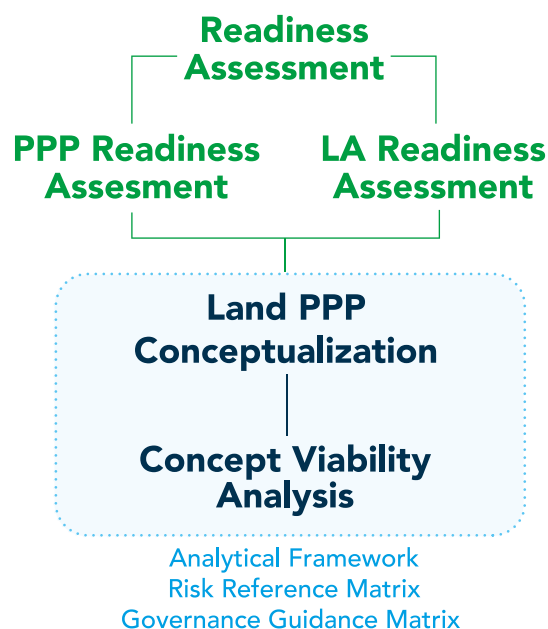
The two reference documents are:

4. The **Land PPP Risk Reference Matrix** provides guidance to users for the identification of potential project concept risks and determines potential mitigation and management approaches early on.
5. The **Land PPP Governance Guidance Matrix** provides an initial framework for governments to work through the key considerations and capacity needed to successfully design, appraise, implement, and govern a Land PPP project.

The various forms, scorecards, worksheets and matrices supporting these tools are laid out in the Appendices to the OF. The Figure 3 decision tree provides a high-level overview on the application of these tools with suggested scores that will be further explained later in the OF.

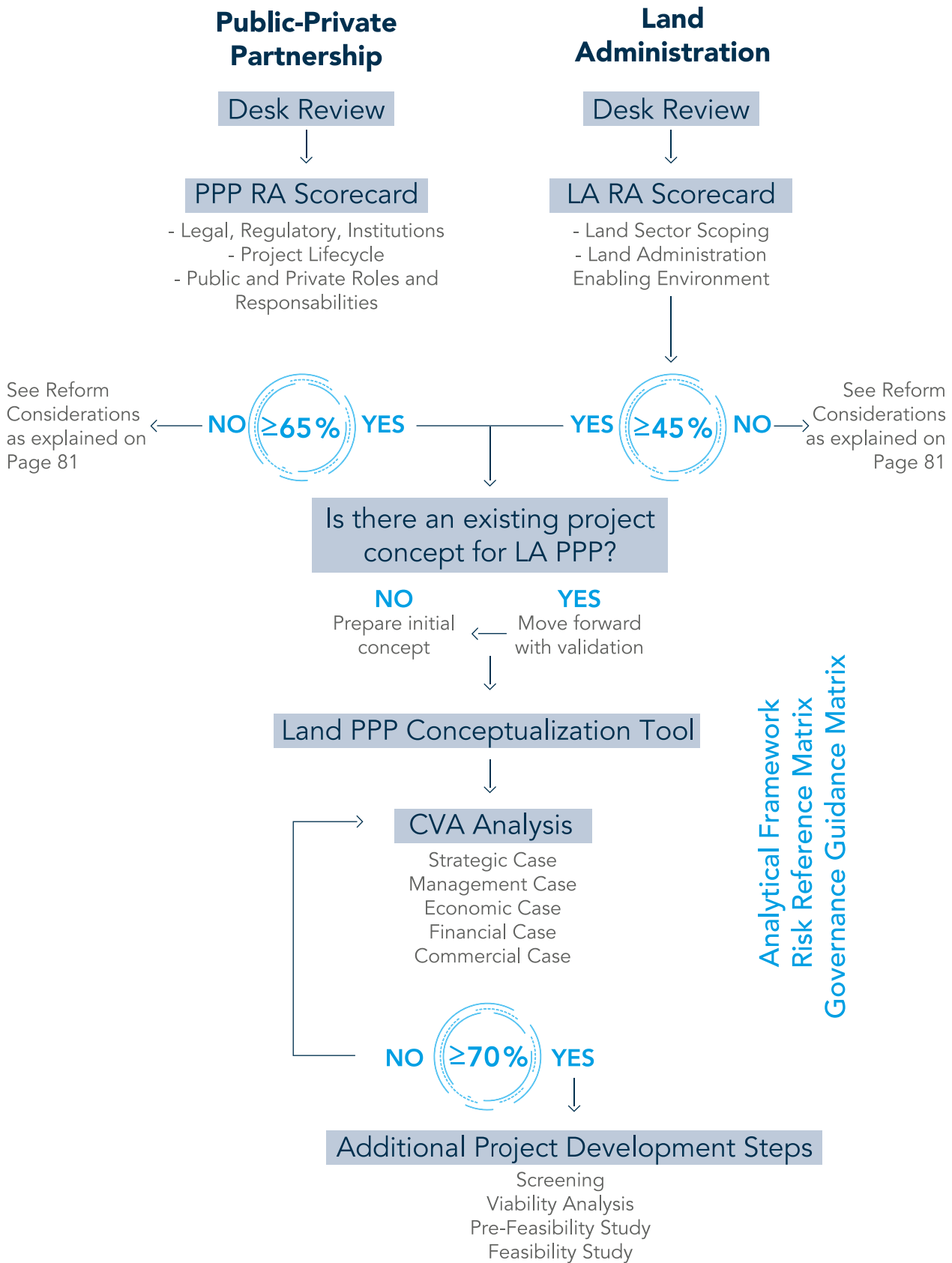
## OF Figure 2: Land PPP Operational Framework Toolkit

### Land PPP Operational Framework Toolkit



OF Figure 3: Land PPP OF Decision Tree

### Land PPP Operational Framework Decision Tree





### 1.3 Implementation of the Operational Framework

The implementation of the OF will require a sponsor or funder, who will provide the resources to apply the toolkit, as well as set a general objective for the application of the OF with a guiding the strategic analysis. The sponsor could be the government of the jurisdiction (self-assessment), a donor or development partners (such as World Bank, MCC etc.).

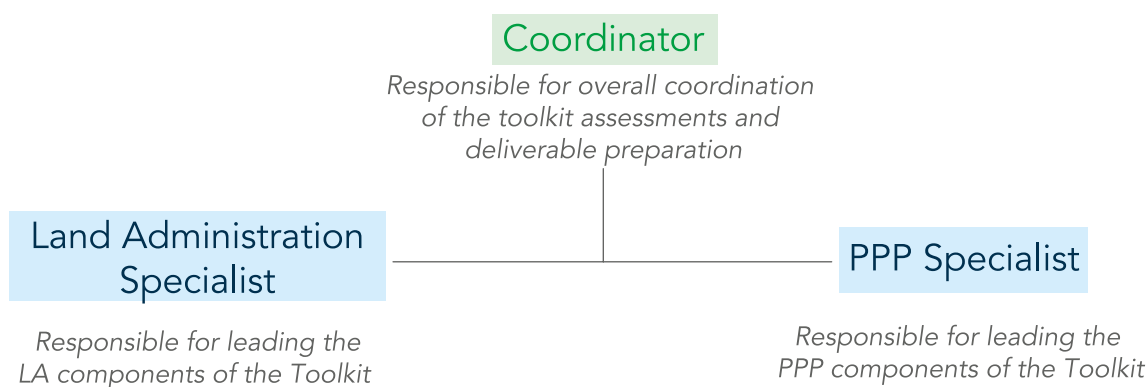
The OF has been designed to be implemented as a rapid assessment by a small team of specialists over a period of 6 to 8 weeks through desk studies and 1 to 2 validation missions of approximately 1 to 2 weeks. The time required for the RA validation mission will depend on the country/jurisdiction and the availability of data and information. There may be serious issues with the lack of data and more validation missions may be required, with the initial missions starting the discussions with stakeholders and identifying the data and information required. Similarly, if a land market assessment already exists and the data is reliable, it may reduce the time and resources needed for the RA. The RA could theoretically be completed in a one-week mission if all data and information are available. In practice, the completion of the RA may require more missions to ensure that all the data necessary to conceptualize a potential Land PPP is available. Therefore, some flexibility in resource planning and budgeting may be necessary.

In terms of the implementation of the OF and its toolkit, at least two technical specialists will be needed:

- Land Administration Specialist
- PPP Specialist (ideally, with a mix of legal and financial expertise)

The responsibilities of these specialists are laid out in the figure below. One of the specialists will be nominated as the Coordinator who will be responsible for leading the assessment.

**OF Figure 4:** Proposed Team Structure



The missions will require interviews with stakeholders involved with both land administration and PPP in the country or jurisdiction of focus. The following figure provides an illustrative example on the types of stakeholders, which should be engaged:

**OF Figure 5:** Illustrative List of Stakeholders

LA Stakeholders	PPP Stakeholders
<ul style="list-style-type: none"> <li>• Land Agency<sup>2</sup> (or Ministry, if applicable)</li> <li>• Line Ministry of Land Agency (if applicable)</li> <li>• Development Partners working within the LA sector</li> <li>• Commercial banks and potential financiers</li> <li>• Private operators who could deliver the services sought</li> <li>• Relevant research associations/professional bodies</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Finance</li> <li>• PPP Unit or Coordinating Body</li> <li>• Ministry of Justice/Attorney General</li> <li>• Investment Committees/Boards</li> <li>• Development Partners working within the PPP sphere</li> </ul>

The specific stakeholders will change depending on the country or jurisdiction of focus, but the lists above provide an idea on the types of stakeholders that should be engaged.

<sup>2</sup>Depending on the country context, the surveying/mapping and registration functions may be separate, which would increase the number of stakeholders to consider.

## **SECTION 2. READINESS ASSESSMENT TOOL**

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# 02

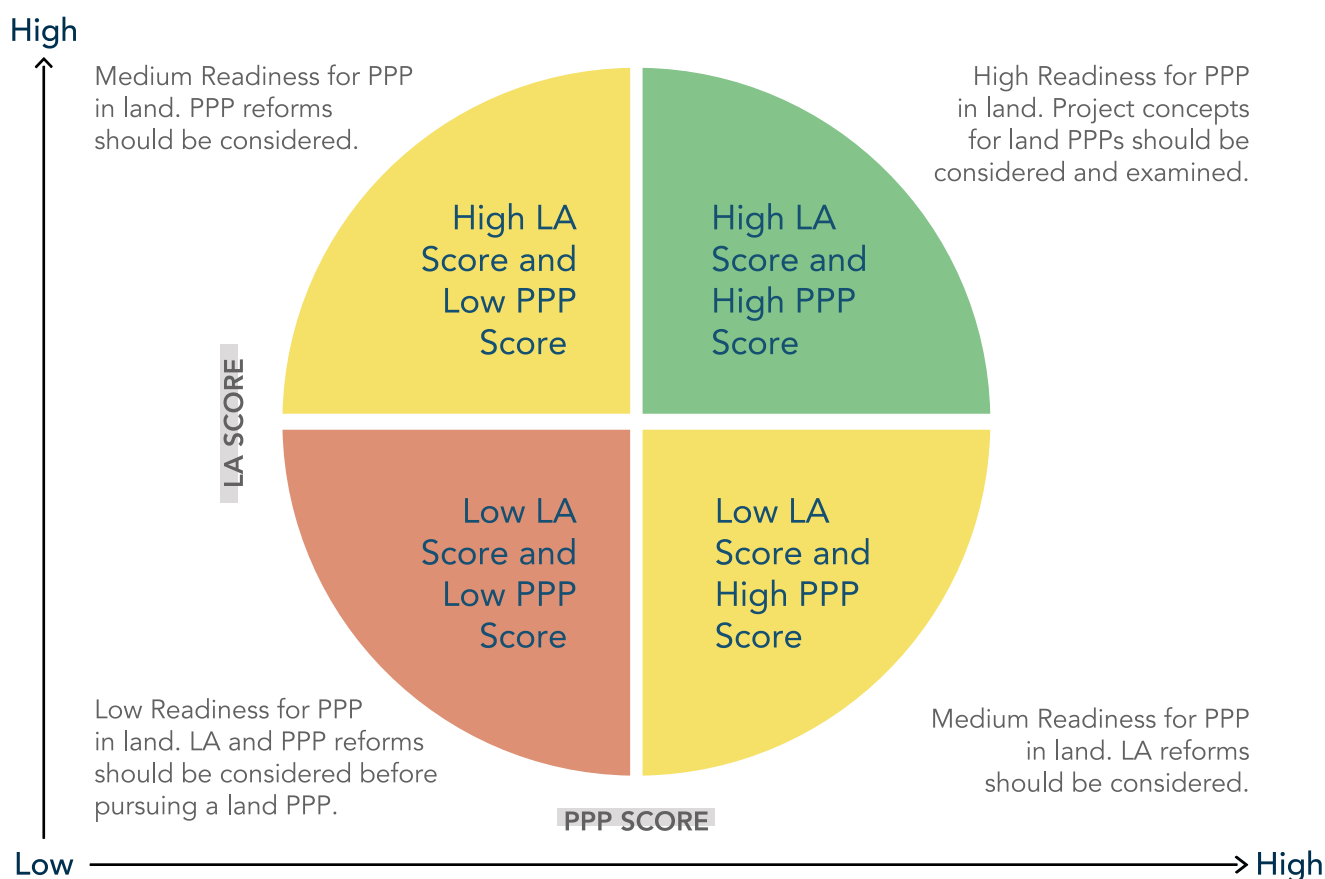
Section 2 presents the Readiness Assessment (RA) tool, a decision-making instrument aimed at assessing if a jurisdiction is potentially ready for the implementation of a PPP in land administration.

The purpose of the RA Tool is to enable the user to determine the readiness of the country/jurisdiction (“target jurisdiction”) to consider a land PPP project concept by assessing important factors such as the enabling environment and macro-level readiness.

By assessing the readiness along two components (PPP and land administration), the RA serves two critical functions. First, it helps countries or donors determine whether the target jurisdiction is in the ‘green zone’ (i.e. high in terms of land administration and PPP readiness) to consider a land PPP project concept. Second, if a target jurisdiction is not in the ‘green zone’, the RA serves a diagnostic purpose wherein it can suggest some reform actions in one or both of land administration and PPP spheres.

The following graphic provides an overview of what can be expected from the RA results and how to interpret them:

**OF Figure 6:** Interpreting Results of the Readiness Assessment



The remainder of this Section walks the user through the RA and provides guidance on conducting the RA's two components:

1. **PPP Readiness Assessment (PPP RA):** The PPP RA helps determine the readiness of the target jurisdiction from the PPP perspective by considering three factors: (A) legal, regulatory, and institutional factors; (B) project lifecycle; and (C) public and private sector roles and responsibilities. A sub-national addendum is also available for assessing PPP readiness at the sub-national level.
2. **LA Readiness Assessment (LA RA):** The LA RA helps determine the readiness of the target jurisdiction's land sector by considering two factors: (A) land sector scoping; and (B) land administration enabling environment. The same LA RA can be used for national and sub-national readiness assessments.

### OF Figure 7: Scoring Evaluation Themes

1. PPP RA	2. LA RA
<ul style="list-style-type: none"> <li>• <b>Legal, Regulatory, and Institutional Readiness:</b> Demonstration that the existing framework enables the use of PPPs in this sector</li> <li>• <b>Project Lifecycle Readiness:</b> Demonstration that there is experience and capacity in implementing and managing the various phases of the PPP project lifecycle</li> <li>• <b>Public and Private Roles and Responsibilities Readiness:</b> Demonstration of the experience, readiness, and capacity of the various stakeholders involved in the PPP process</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Land Sector Scoping:</b> Demonstration of the availability of reliable data and transparency in the LA sector</li> <li>• <b>Land Administration Enabling Environment:</b> Demonstration of clarity of well-defined institutional arrangements and procurement capacity with respect to the private sector</li> </ul>

The findings of these assessments will inform the decision-making process for determining the readiness of a target jurisdiction for considering a PPP in land administration. The summary scorecard gives the user an overview of the evaluation areas for both the PPP and LA RAs. An overview of the scores and weights are also presented in the section below. The methodology is discussed in this section and the detailed scorecards are available in Appendix One.

The following sub-sections showcase the desk review and validation mission processes for both components.

## STEP 1: RA Desk Review

For the first phase, the specialists will rely on existing data and information to complete the desk review. Guidance on the two components' desk review processes is provide below:

### I. PPP READINESS ASSESSMENT

#### A. Sources

For the PPP RA component, users will draw key information from existing documents and reports to inform the initial scoring. The types of reports available will vary, depending on the country. Key indicative documents to inform the assessment, however, would include the following:

- Infrascopie by EIU
- ESCAP country assessment report
- World Bank PPP country readiness diagnostic
- Other donor-sponsored PPP diagnostic or project reports (such as materials published by the Asian Development Bank, Inter-American Development, USAID, MCC etc.)
- Economic Forum global competitiveness report
- Country growth/development strategy
- Procuring Infrastructure Public-Private Partnerships Country Results
- Assessments of previous PPP projects in-country
- Relevant country legislation, regulations, guidelines, and policies related to PPPs, public procurement, and public finance management

The PPP Knowledge Lab, a joint initiative by the World Bank Group and its partners - the Asian Development Bank, the European Bank for Reconstruction and Development, the Inter-American Development Bank, the Islamic Development Bank - is supported by PPIAF and provides a good starting point for assessing countries which are covered. This starting point will provide a general overview of PPPs in a select jurisdiction and links to key documents, which will be pertinent for gathering information during the desk review phase.

#### B. Input Forms

Specialists should use the PPP RA Scorecard in Appendix One of the OF to identify the key questions to be answered and compile analysis results. The scorecard is structured to enable users to draw key information from relevant sources and then assess the findings, using the guidance outlined in the scorecard questions. The PPP RA is completed at the country level. If a Land PPP is being considered at a jurisdiction level, then the PPP RA Scorecard addenda should be completed to capture the readiness at jurisdiction level. The completed PPP RA Scorecard should then be validated during the mission.

## II. LA READINESS ASSESSMENT

### A. Sources

For the LA RA component, users will draw from existing documents and reports key information to inform the initial scoring. The types of reports available will vary, depending on the country, especially if good land market assessments exist. Key indicative documents to inform the assessment, however, would include the following: Land market assessment

- Real estate market reports
- World Bank's Doing Business (DB) Index for Registering Property
- World Bank's Land Governance Assessment Framework (LGAF)
- Other donor-sponsored land market diagnostic or project reports (such as materials published by MCC, DFID, USAID, IADB etc.)

If the reports recommended are not available for the country or jurisdiction being considered (for example, if the country is outside of those for which LGAF reports have been produced), the user can review the report methodology and replicate to the degree possible where necessary to obtain a base understanding. When such an approach is adopted, it should be noted in the outcome reports.

### B. Input Forms

Specialists should use the LA RA data forms in Appendix One during this desk review in order to guide the analysis and structure the results. The forms have been designed to focus on the relevant dimensions in DB and LGAF. Where a recent LGAF assessment is not available, users can replicate the LGAF questions to determine the score for the relevant metrics. The desk review LA RA is an interim product that provides a basis for stakeholder discussions and completion of the LA RA assessment.

## STEP 2: RA Validation Mission

Having completed the desk reviews, the specialists will move to the second stage of the RA – the validation mission. During the validation mission, the specialists will meet with key stakeholders, conduct additional interviews, and corroborate their findings. The process for the two components is outlined below.

### I. PPP READINESS ASSESSMENT

The validation mission will enable users of the tool to corroborate the information and scoring for the PPP component of the RA. The process will focus on reviewing and confirming the information from the desk review, as well as collecting additional information on the following:

- PPP legal and regulatory framework (including assessing any planned revisions, amendments or new laws)
- PPP institutional framework (what entities are involved and in what capacity)
- Past experiences with PPPs (on both the national and subnational level) and the perceived success of such projects
- Past experiences specifically with PPPs in eGovernment solutions

- Unsolicited proposals (USPs) for PPPs submitted and how these proposals were handled (if any and if allowed for in the PPP legal framework)
- Past investors in PPP projects and investors who have expressed interest in PPP arrangements with the government
- Past private sector operators in PPP projects and investors who have expressed interest in PPP arrangements with the government
- Current government perspectives on PPP and instances of political support or pushback

If a Land PPP is being considered at the sub-national level, the PPP RA Scorecard addendum should also be completed and validated.

Key interviews would include meetings with the Ministry of Finance, PPP Unit or equivalent entity, and key line ministries. The exact list of key meetings will vary country to country, depending on the PPP institutional framework in place.

This corroborating information will be used to confirm the initial scoring from the desk review phase of the PPP RA.

## II. LA READINESS ASSESSMENT

The validation mission should aim to achieve the following within the LA RA component:

- Review/confirm the information gathered in the desk review
- Gather detailed information (in the full country or in a defined jurisdiction where there is good geographic coverage) of:
  - Land market assessments
  - Market transaction data and its reliability
  - Key land policies and legislation that impact on the provision of LA services, especially if private sector is barred from providing any specific services
  - Information on the strategy to complete first registration (if applicable)
  - Annual expenditure required for the provision of LA services
  - The fee schedule for LA services.

The necessary information will be gathered during the validation mission and will be used to complete the LA RA scorecard.

### STEP 3: Scoring

The two components of the tool are intended to be used concurrently, with users undertaking PPP and LA readiness assessments during the synchronized desk review and validation mission. Each component has its own scoring. The scorecards in Appendix One are used to guide the assessment for both components. The scorecards have seven evaluation themes in total, as laid out below:

These evaluation themes—three in the PPP RA and two in the LA RA—cover key aspects relevant to the development of a Land PPP project concept. Details are discussed in Step 3 and specific guidance on how to score these components is provided in the scorecard in Appendix One.



In sum, if the RA scores reflect the following, the user should proceed to undertake the CVA:

- PPP Readiness Assessment score of 65% or higher
  - The score for the Sub-National PPP RA is 70% or higher
- LA Readiness Assessment score of 45% or higher

If the scores received are lower than the suggested thresholds, users should examine the weakest scoring categories to identify potential areas for reform. The assessment can be retaken once such barriers/deficiencies are addressed. By the same token, some governments and land agencies may exhibit a demonstrable commitment to implementing reforms in a manner that would enable the PPP process to progress through subsequent phases while requisite reforms are being carried out in parallel.

**The thresholds for both the PPP and LA RAs are only indicative.** The **PPP RA threshold of 65% (70% for sub-national) is highly encouraged** as the analysis assesses the fundamental ability to and legality of implementing the project through the PPP modality in the specific jurisdiction. Similarly, the **LA RA threshold is recommended at 45%. Certain contexts may also necessitate the use of a different threshold and should be discussed on a case-by-case basis by all stakeholders during the planning for the RA.** There is, however, flexibility to some degree if a lower threshold can be justified due to specific contextual elements, depending on whether a PPP is legally permissible in the jurisdiction being considered. In such a case, **if a lower threshold is thought to be justifiable, it should be set prior to the analysis being undertaken** and the rationale for using lower thresholds should be noted.

**If a jurisdiction meets the pre-set thresholds, the tool users should proceed to the next step, the Land PPP Conceptualization Tool.**

#### ***Scores Below Thresholds: Consider a Reform Program***

The RA has been designed in such a way that if a target jurisdiction falls short of the respective land and/or PPP RA thresholds, with results in the yellow or red 'zones' as shown in OF Figure 6, the RA scoring can be used as a preliminary diagnostic tool to identify key issues in the land administration and PPP spheres that could be considered in a government-led or donor-supported reform program.

Specifically, the guidance on the scorecards allows for governments to review where the most significant potential impediments to implementation are (the areas corresponding with the lowest scores) and identify areas where reforms may be most needed. The scoring guidance indicates some of the elements of readiness required, allowing for governments to identify the strategic roadmap needed to enhance the jurisdiction's readiness. For example, government may find that existing legislation prohibits the participation of the private sector in the provision of land services or that there is a lack of clear PPP guidelines and established processes for identifying, appraising, structuring, procuring, managing, and evaluating PPPs, both of which may limit the readiness of the jurisdiction for such a transaction. Efforts and resources can then be considered for addressing this gap to move towards a better positioning for the consideration of the PPP modality. Therefore, the RA exercise can also help identify potential reform areas.

Governments or donors may then use the RA to come back and re-evaluate a target jurisdiction to assess the readiness for a land PPP project concept.

## **Scoring and Scorecards**

The scorecards and scoring process are further explained below:

### **I. PPP RA Scoring**

For the PPP Readiness Assessment, the RA uses a similar assessment methodology as the United Nations PPPs readiness assessment tool<sup>3</sup> in which a jurisdiction's score is calculated based on a series of questions. For each question, its rationale (or relevance to PPPs in land administration), the proposed source of information for responses, and the scoring guideline are provided.

The PPP RA requires users to score each question from 0 to 4. The intention of providing a scoring guideline for each question is to reduce multiple interpretations of questions by stakeholders and allow some degree of consistency to assessments. Guidance on how to score for each category is provided in the scoresheets in Appendix One.

If the Land PPP is being considered at the country level a score for the PPP RA of 65 percent will be considered a Positive Result, suggesting users move forward. Scores of less than 65 percent will receive a Negative Result, suggesting that potential reforms in the evaluation themes with the lowest scores should be examined before moving forward with the conceptualization of a potential Land PPP.

Where a Land PPP is being considered at the sub-national level, the scoring threshold of 65 percent for the PPP RA remains in effect. However, it also becomes necessary to undertake the PPP RA Sub-National Addendum for which the scoring threshold is 70 percent. Only when both thresholds are exceeded will there be a Positive Result, suggesting the country is ready to implement a Land PPP at the national and/or sub-national level.

The elevated scoring threshold for sub-national initiatives is due to the challenges facing sub-national projects that are often less pronounced at the national level. This includes a lack of institutional resources, both human and financial, less experience implementing larger projects, and a greater number of involved stakeholders across different levels of government.

<sup>3</sup>For more information visit <https://www.unescap.org/resources/ppp-readiness-self-assessment>

## PPP Readiness Assessment

**OF Figure 8:** PPP RA Summary Scorecard

Evaluation Area	Question No.	Question rationale and information sources	Score	Weight
A - Legal, Regulatory, and Institutional	A1	Is there an established PPP legal framework, which has demonstrated success in managing previous PPPs in-country?	0-4	33.3%
	A2	Is there established PPP Regulations and Guidelines in place, supporting the broader PPP framework and legislation?	0-4	33.3%
	A3	Is there a clear and established institutional framework, defining the roles and responsibilities of various public sector actors in relation to PPPs?	0-4	33.3%
<b>Total for Evaluation Area A</b>			<b>12</b>	<b>27.3%</b>
B - Project Lifecycle	B1	Are there clear and established procedures for identifying, screening, and prioritizing PPPs in line with national priorities and objectives?	0-4	16.6%
	B2	Is there an established market sounding and private sector engagement strategies in place for PPP projects?	0-4	16.6%
	B3	Are pre-feasibility studies, feasibility studies, and financial analyses required to be conducted during the appropriate stages of the PPP project lifecycle?	0-4	16.6%
	B4	Are there established procurement processes for PPP projects, which focus on maximizing VfM and transparency, while minimizing the risk for corruption or political intervention?	0-4	16.6%
	B5	Is there an established approach to the development of PPP contracts, which outline the roles, responsibilities, and obligations for all parties involved, as well as addressing pertinent and applicable safeguards?	0-4	16.6%
	B6	Does the country have a history of and demonstrated capacity for completing PPP projects successfully under the existing framework?	0-4	16.6%
<b>Total for Evaluation Area B2</b>			<b>24</b>	<b>54.5%</b>
C - Public and Private Roles and Responsibilities	C1	Is there a clear political will and support behind the use of PPPs, with appropriate institutional measures for enhancing understanding of the mechanism among the government entities?	0-4	50.0%
	C2	Has there been external technical support for PPPs provided in the past? Is there plans for additional support to be provided in the future?	0-4	50.0%
<b>Total for Evaluation Area C8</b>			<b>8</b>	<b>18.2%</b>
<b>Total Points Overall</b>			<b>44</b>	<b>100.0%</b>

## **II. LA RA Scoring**

For the LA Readiness Assessment, the LA RA uses a similar assessment methodology to that of the PPP RA in which a jurisdiction's score is calculated based on a series of questions. For each question, its rationale (or relevance to PPPs in land administration), the proposed source of information for responses, and the scoring guideline are provided.

Similar to the PPP RA, the LA RA requires users to score each question based on the recommended scoring. Unlike the PPP RA where consistency across scores is advised, the LA RA scores offer some flexibility. While most of the LA RA questions are scored 0-4, a few are scored 0-6, 0-8, and 0-12. The intention of providing a scoring guideline for each question is to reduce multiple interpretations of questions by stakeholders and allow some degree of consistency to assessments. Guidance on how to score for each category is provided in the scoresheets in Appendix One.

It is important to note that while the PPP RA delves into the process (answering the how of PPPs), the LA RA is left somewhat flexible as it answers the target service (answering the what of PPPs). This has been done to give users the flexibility to assess the specific context of the land PPP project concept, and parts of the LA RA can, in fact, support ideation of the context. For example, a lower score may result from an area that may be particularly ripe for PPP exploration, such as digitization of records and/or establishment of a land information system.

The flexibility LA RA offers is the ability to change weights depending on user preference. This is not suggested to get the desired results from the process, but rather to set the weights before the process. For example, a development partner already engaged in institutional reform in a country may wish to put more weight on the sector scoping. Another scenario could be a donor needing to prioritize the early stage assessment may want to give higher weight to the institutional clarity and capacity while deciding where to fund pre-feasibility or feasibility studies.

Therefore, it is important to remember the dynamic nature of the LA RA and the importance of user discretion in implementing the operational tools associated with the LA RA.

The threshold of the LA RA has been recommended at 45 percent as an adequate basis for moving forward with the next step. The PPP RA threshold is set higher due to the PPP readiness being very specific whereas the LA readiness depends in large part to the land PPP conceptualization, which is the next step.

## Land Administration Readiness Assessment

**OF Figure 9:** Land RA Summary Scorecard

Evaluation Area	Question No.	Question rationale and information sources	Score	Weight
A - Land Sector Scoping	A1	Is the data on land administration and land market available (e.g. coverage, transactions etc.)?	0-4	13.3%
	A2	What is the private sector stakeholders' (e.g. brokers) and researchers' perception of the reliability of data on land administration and land market?	0-4	13.3%
	A3	How does the target jurisdiction score on transparency of land administration?	0-6	20.0%
	A4	Is there a clear schedule of fees publicly available?	0-4	13.3%
	A5	Are informal payments discouraged?	0-4	13.3%
	A6	How does the target jurisdiction rank in terms of land dispute resolution?	0-8	26.7%
<b>Total for Evaluation Area A</b>			<b>30</b>	<b>50.0%</b>
B - Land Administration Enabling Environment	B1	Is there a clear institutional structure for land administration functions (both geographic and legal functions) in the target jurisdiction?	0-12	40.0%
	B2	Are policy formulation, implementation, and arbitration properly separated?	0-4	13.3%
	B3	Do the responsibilities of the ministries and agencies dealing with land overlap (horizontal overlap)?	0-4	13.3%
	B4	Do administrative functions in the land sector overlap (vertical overlap)?	0-4	13.3%
	B5	With respect to the executing agency, is there history of engagement with private sector participation?	0-6	20.0%
<b>Total for Evaluation Area A</b>			<b>30</b>	<b>50.0%</b>
<b>Total Points Overall</b>			<b>60</b>	<b>100.0%</b>

# SECTION 3. LAND PPP CONCEPTUALIZATION TOOL

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# 03

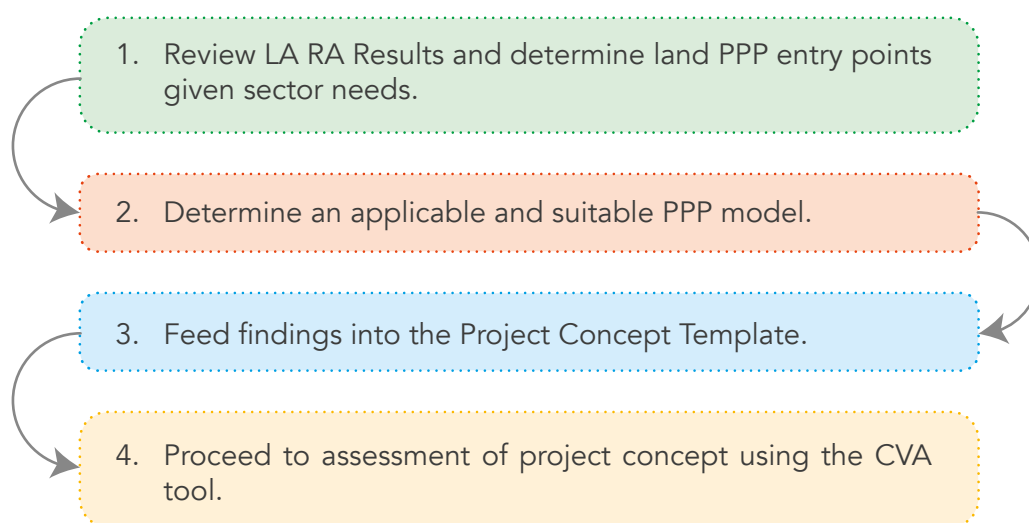
The purpose of the Land PPP Conceptualization Tool is to provide users a framework with which to develop or assess a Land PPP project concept, where the project concept can be defined as a product or service that is being considered for procurement through a PPP arrangement.

Following the completion of the RA, a jurisdiction may be assessed as ready to consider a Land PPP, but there may still be a lack of clarity on the specific nature of such a PPP. This tool provides guidance on how users can approach the development of the project concept. The tool can also be used to validate an existing concept. This tool relies on the sector scoping and enabling environment discussed in the LA RA tool and captures the information necessary to apply the subsequent CVA tool. It is important to note that the tool is indicative and does not cover all possible scenarios, only the most popular or obvious ones. Therefore, users should feel free to test emerging ideas through the CVA, if needed. Users can also refer to AF Figure 2 for possible land PPP entry points.

### 3.1 Land PPP Conceptualization Tool

Users are advised to undertake the following steps for the design of a Land PPP project concept as part of the Land PPP Conceptualization Tool:

#### OF Figure 10: Project Concept Development Process



These are elaborated upon in the following sections. The worksheet for the full Land PPP Conceptualization Tool is provided in Appendix Two.

#### STEP 1: Determine Land PPP Entry Points

LA services can be delivered in several different modes or channels and there can be several entry points for the land PPP (see Figure 2 of the Analytical Framework). It is recommended to use this tool along with the entry points figure. Some key aspects that need to be considered in developing a Land PPP concept include:

## OF Figure 11: LA Factors

Key Factors	Guidance
<b>Factor 1: PPP Driver</b>	A summary of the key rationale for considering a Land PPP (lack of capital, lack of resources, sustainability of existing land services investments or other reforms, poor service delivery, difficulties with institutional roles and mandates).
<b>Factor 2: Geographic Scope</b>	The geographic scope of the potential Land PPP (whole jurisdiction, part jurisdiction (perhaps urban areas or locations where first registration is complete), or a phased approach that may change over time).
<b>Factor 3: Selection of Services</b>	Current type and level of service delivery. Digitization levels with respect to data, IT systems, and service delivery. Confirmation that existing services can be improved and/or new added services under consideration can be provided by a private sector operator under a PPP scheme given the existing legal framework (or with amendments, if necessary and possible).
<b>Factor 4: Transaction Volume and Revenue</b>	Level of formal transactions in the addressable market and related revenues
<b>Factor 5: Cost</b>	Current costs of providing services through public provision. Capex requirements for additional investments and upgrades.

## STEP 2: Determine an Applicable and Suitable PPP Model

Users should then consider which PPP model and structure would be best suited to the project concept. Using the information above, the following figure provides guidance on what PPP models and structures are best suited to which types of projects:

## OF Figure 12: PPP Structure Guidance

PPP Structure	Guidance Questions
<b>Joint Venture</b>	Projects which involve the following will be most likely suited to Joint Venture contracts: <ul style="list-style-type: none"> <li>• Revenue and cost sharing in many or all aspects of land administration, including software development</li> <li>• IT hardware and software operations</li> <li>• Surveying</li> <li>• Back office functions and customer service responsibilities</li> </ul>
<b>Concession</b>	Projects which involve the following will be most likely suited to concession contracts: <ul style="list-style-type: none"> <li>• Comprehensive technology upgrading</li> <li>• Full commercial operation of land registries and related functions</li> </ul>



### STEP 3: Feed Findings into the Project Concept Template

This information will then feed into the Project Concept Template, which will be the structure through which users can develop their Land PPP concept in preparation for conducting the CVA. The Project Concept Template overview is presented below, and details can be found in Appendix Two.

To move forward to the CVA stage, it is critical that the project concept is developed and includes the following information:

#### OF Figure 13: Project Concept Template

Section	Guidance Questions
<b>Project Objective:</b>	What issue does the project address? What does the project aim to achieve? Improved access to services? Reductions in times taken for processing?
<b>Targeted Services and/or Functions:</b>	What services and/or functions does the project aim to provide? What level of service is encompassed in the scope of work of the project?
<b>Stakeholders:</b>	What stakeholders are involved? Consider the public sector, the private sector, financiers, operators, and users. What are their roles and responsibilities in the project?
<b>Project Demand:</b>	Is there a demand for the services or functions offered by the project? Is the demand enough to justify the project?
<b>Economic Benefits:</b>	What are the tangible economic benefits of this project? Who benefits? Are there potential economic issues posed by the project implementation?
<b>Legal and Regulatory Regime:</b>	What legal and regulatory regime would govern the project? Does it adhere to these requirements?
<b>Capital Investment Costs:</b>	What are the estimated capital investment costs of the project?
<b>Operating Costs:</b>	What are the estimated annual operating costs for the project? This would include the running of facilities, staff, and other such costs.
<b>Revenue Estimates:</b>	What is the estimated annual revenue of the project?
<b>Environmental and Social Impact:</b>	What is the environmental and social impact of the project? Are there any major environmental and/or social issues to flag at an early stage?
<b>Project Risks:</b>	What are the risks involved in the project? Consider the Risk Identification and Mitigation Guidance Tool in Section 6.
<b>Proposed PPP Model:</b>	What PPP model would be used for this project? Consider the results of the PPP Structure Guidance Tool.

### STEP 4: Proceed to Project Rapid Assessment using the CVA Tool

If the information and concept can be presented in the Project Concept Tool with sufficient information and data to support the proposed concept, users can then proceed to Section 4 to conduct an early-stage rapid assessment of the project concept.

# SECTION 4. CONCEPT VIABILITY ANALYSIS TOOL

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# 04

This Section presents the Concept Viability Analysis (CVA) Tool, a decision-making instrument that facilitates an early-stage rapid assessment of whether a land administration reform or modernization project could be undertaken as a PPP at the nascent project concept stage.

Specifically, Section 4 provides guidance on utilizing the CVA Tool. The CVA Tool is accompanied by a Financial Analysis Worksheet, which is used to inform the assessments undertaken in the Financial Case. The CVA Scorecard can be found in Annex Three and guidance on using the financial analysis worksheet is presented in Appendix Four, along with the Excel template.

## Assessment Tool Overview

The CVA Tool provides a structure through which the project concept can be systematically assessed. The Tool is constructed around “Five Cases” that act as layers of decision-making when evaluating a land administration project on its suitability as a PPP:

1. **Strategic Case:** The Strategic Case outlines the project concept’s rationale, objective, and potential benefits. The Case also covers the roles and responsibilities of various project stakeholders and existing arrangements between these actors. The Case objective is to ensure that the project concept is clearly defined, the roles and responsibilities of key stakeholders are identified, existing challenges to land administration service delivery are addressed by envisioned reforms, and the proposed reform aligns with government policies.
2. **Economic Case:** The Economic Case analyzes the quantitative economic benefits that the project concept is expected to deliver, both directly through improved service delivery in land administration as well as broader societal benefits. The Case objective is to ensure that only those project concepts that result in significant economic benefit to the general populace are pursued in order to uphold the *raison d’être* of PPPs.
3. **Management Case:** The Management Case examines the existence of legal and regulatory barriers to implementation of the project concept, either through the PPP framework or land sector specific legislation. The potential for detrimental social and environmental impacts stemming from the proposed land administration reforms is also considered. The Case objective is to scrutinize the legal eligibility of the project concept and to uphold best practice by mitigating potentially negative consequences on the environment and local communities resulting from implementation.
4. **Financial Case:** The Financial Case provides a rudimentary financial appraisal of the project concept focused on developing a reliable expectation of financial viability based on the Project Internal Rate of Return (PIRR). Specific attention is devoted to evaluating capital expenditures (CAPEX), operating expenditures (OPEX), and the revenue generating capacity based on transaction volume, growth rate, and levies, for example. The Case objective of this financial modelling exercise is to make a preliminary determination of whether the project concept is financially viable to be carried out as a PPP based on available information.
5. **Commercial Case:** The Commercial Case evaluates whether the proposed project concept has adopted the most commercially appropriate structure to support its long-term viability as a PPP. The Case objective is to provide an assessment of the suitability of the proposed technical and financial structuring approach based on the results of the preceding assessments to identify potential shortcomings such as related to payment mechanism or market competition.

These cases have been drawn from the underlying principles of project feasibility. Each case contains a list of questions to help government agencies and development partners consider the key factors guiding the project’s success at this earlier stage. The results of this assessment are then fed into the CVA Scorecard, which is presented in Appendix Three.

## Scoring

The questions for each Case will receive a “Yes” or “No” answer, with the former response receiving a score of 1 and the latter 0. The indicative responses and guidance sections below provide an understanding of how to apply this scoring system.

Scores will then be averaged to achieve the overall Case score between 0-1. The overall Case scores will then be averaged to identify a final Project Score.

An overall project score of over 70 percent will be considered a Positive Result. Scores of less than 70 percent will receive a Negative Result. 70 percent is identified as the threshold reflecting the required foundation a project must have to be able to move forward in the project development lifecycle.

The threshold of 70 percent is arbitrary and may be set higher or lower. This Tool, however, seeks to define a cut-off for the scoring. Based on global experiences in PPP development, a PPP proposal with a relatively low scoring will be hindered by impediments and bottlenecks as it progresses through project development. For example, government approvals and financial support might prove unsustainable, stalling project development.

Due to the differing nature of certain projects and country contexts, this threshold may change in line with specific conditions or circumstances, as well as the degree of openness to risk during project development. For example, countries with high RA results may consider lowering the threshold to 60 percent. Similarly, countries with lower RA scores may consider raising the threshold as they lack institutional knowledge in implementing successful PPP projects elsewhere.

A different threshold can be adopted if the country and project circumstances justify such changes. However, it is recommended that a score of 70 percent will ensure only the most viable and sound concepts proceed to the next stage of project development. In sum, the scores are assessed as follows:

- **Over 70 percent:** The project is ready to move forward to the pre-feasibility and feasibility studies in the next phase of the project lifecycle.
- **Less than 70 percent:** The project does not demonstrate the required grounding to move forward. Project design must be revisited and structural alternatives considered.

The exact thresholds should be determined during the first validation mission in order to accommodate different contexts.

It is important to note that issues or complications that can be discerned at this preliminary stage of project development often translate into higher risks and, by extension, higher government costs. Most project related issues and risks can be managed, but will likely translate to higher costs and, most likely, higher government payments.

**Results of this scoring should be treated confidentially as they could become commercially-sensitive later, if the concept proceeds to the pre-feasibility study and feasibility study stages in the PPP Lifecycle.**

Due to data constraints and the early stage of analysis, the Five Cases can only be broadly conceptually described as certain information may not be available or otherwise difficult to obtain when undertaking scoring. Judgment and experience in the structuring of a PPP is vital in the evaluation of the Five Cases, which may require external assistance or advisory support.

The following sections provide an overview of these Cases:

## 1. Strategic Case

This Case aims at defining the actual need for the land administration project concept within the specific country context, as well as tentatively quantifying its future expected demand. It addresses the following overarching questions:

- Why is this land administration project concept being considered?
- What is the expected future demand for land administration functions/transactions?

This Case examination also aims at defining where the PPP project concept will be in the land administration process and how the project will affect the agents involved, including end-users, notaries, ministries, and other stakeholders. For instance, a decision must be made if the conceptualized PPP envisions the management of certain land administration processes.

Another PPP scoping decision included in this process aims at the choice of whether a PPP project concept should adopt either of the following approaches:

- Combine both first registration (partial or full establishment of rights and boundaries) and the subsequent roll-out of ongoing administration functions and transactions.

or

- Focus exclusively on administration functions and transactions. In this case, and only if applicable, a decision is required on who holds responsibility for the first registration of land (or completion of this process) and how this work package can then be handed over to the PPP operator.

In general, the Tool recommends the second project concept be considered under this CVA. Based on previous experiences, the second is the most viable project type in terms of private sector appetite. Large scale systematic first registration in the first option usually falls under the purview of the government in question, and could be completed through support from development partners, but may be included as ad hoc first registration within the purview of a private operator if processes and fees are set and the government retains essential functions, such as registration.

For example, in the previous case studies of PPPs in land administration, projects have focused predominately on the modernization, digitization, and operation of registration services. While structuring first registration projects through a PPP vehicle may be possible, such projects are much more complex in nature and require additional preparatory, market sounding, and risk management work than the second form of projects.

The Strategic Case also describes the key project stakeholders involved in the concept. These players are crucial in developing and implementing the envisioned project. They determine, from the beginning to the end of the contract, if the conceptualized PPP will be able to capture its projected financial and economic values. Salient stakeholders include, for example, the various key ministries, municipalities, financiers, and notaries involved in the process.

Finally, a PPP project concept's Strategic Case should be cemented in and linked to national, regional, or sector development plans and/or policies. If this is not the case, the project concept's further development and approval could be difficult or, in certain situations, impossible. Political will and buy-in, tied to the government's strategies planning cycle, will bolster the viability of the project concept.

In this Case, the following questions should be addressed in line with the interpretative guidance provided:

**OF Figure 14:** Strategic Case Questions and Guidance

Questions	Interpretative Guidance	Scoring Guidance
1. Can the main challenges associated with delivering land administration functions and systems be described?	Identify the challenges/deficiencies in current land administration frameworks in order to highlight those areas where reform is required. Issues may include lengthy, expensive, or otherwise onerous administrative procedures for property registration and transfer.	Score 1 if the main challenges associated with delivering land administration functions can be described.
2. Can the project concept be defined and structured to support specific service delivery reforms?	Examine potential PPP solutions to improve public service delivery for areas with identified deficiencies. For example, a fragmented system may need a single centralized and well-functioning IT system that captures all required land transactions. Rather than being dispersed, as may be the current case, the system should be housed in a central database.	Score 1 if the project provides a solution to a key challenge in land administration.
3. Can the primary government stakeholders that will be impacted by implementation of the project concept be identified?	Evaluate whether it is possible to identify the primary government stakeholders that will be impacted by proposed reforms. Stakeholders may include notaries, cadastres, ministries, involved departments, tax agencies, IT system managers, field staff, and others.	Score 1 if the project concept provides a clear breakdown of the government actors involved in service delivery.
4. Can the main roles, responsibilities, and obligations of government agencies supporting the project concept be identified?	Determine whether the project concept has accounted for need to allocate institutional roles and responsibilities to key government actors supporting land administration.	Score 1 if the project concept has allocated specific roles and responsibilities to each of the relevant parties that reflect their institutional mandates.
5. Can the public need for land administration functions related to the project concept be estimated (e.g. over the short-, medium-, and long-term)?	Calculate projections of future demand over time for land transactions by extrapolating historic figures (recognizing that in many cases the projections are based on guesswork rather than hard evidence of demand).	Score 1 if the project solution aligns services expected demand.
6. Does the project concept align with existing national, regional, local, and sector plans?	Scrutinize current national, regional, local, and sectoral plans and policies to see if land administration reform with private sector support through PPP is envisioned.	Score 1 if the project concept aligns with the envisioned scope of land administration reform as provided in relevant plans or policies.

*Scoring guidance: If the answer to the question is yes, score 1. Otherwise, score 0.*

## 2. Economic Case

The economic viability of proposed reforms is of primary concern to the government, regardless of whether they may be carried as a PPP or undertaken through traditional government procurement. The Economic Case is targeted at exploring whether the project concept in question is sensible and appropriate, as well as adding value to the national, regional, or local economy. At this level of project development, the project concept's economic benefits can be only qualitatively described.

In this Case, the following questions should be addressed in line with the interpretative guidance provided:

**OF Figure 15:** Economic Case Questions and Guidance

Questions	Interpretative Guidance	Scoring Guidance
1. Can the project concept's economic benefits be described qualitatively?	Evaluate whether the project is likely to result in broader economic benefits.	Score 1 if economic benefits can be qualitatively defined.
2. Is the project concept expected to lower the time or cost of delivering land administration services?	Identify the specific benefit provided by the project concept in relation to the delivery of land administration services. Benefits may include faster transaction processing times, reductions in staff costs, higher transparency, formalization of property rights, improved accuracy in cadastral mapping, sustainability of recent investments or other reform initiatives, for example.	Score 1 if the project provides a solution to a key challenge in land administration.
3. Is the project concept expected to generate business opportunities for local companies to support service delivery improvements?	Analyze whether the project concept requires the kind of private sector support that is available from suitable local companies, rather than foreign expertise. This could be through reference to specific functions required under the concept, or in relation to implementation of the entire project.	Score 1 if there are local companies that appear suitably qualified to provide the kind of services in whole or part required by the project concept.

*Scoring guidance: If the answer to the question is yes, score 1. Otherwise, score 0.*

## 3. Management Case

In the Management Case, the Tool will primarily assess if the legal and regulatory framework is conducive towards a PPP. Differently said, it answers the question, from a legal and regulatory standpoint, if a PPP might be possible and under which conditions.

At this point, comprehensive legal due diligence is not required. However, an understanding of how the project concept will align with the country's current legal and regulatory framework is critical, in terms of the PPP framework and land sector, and regulations on environmental and social impact mitigation. Any critical underlying legal issues or impediments can be discerned through this assessment.

In this Case, the following questions should be addressed in line with the interpretative guidance provided:

**OF Figure 16:** Management Case Questions and Guidance

Questions	Interpretative Guidance	Scoring Guidance
1. Are there any legal or regulatory obstacles to the project concept under PPP legislation? Are there any legal or regulatory barriers to the project concept in land sector-specific legislation?	Analyze the regulatory framework established through PPP legislation and regulations to evaluate whether any prohibitions exist that may render land administration projects ineligible for PPP. Assess whether the project concept is of a nature that is permitted under the legal framework. Consider institutional roles and mandates under land law and their potential effect on PPP attractiveness. Examine sector-specific legislation and regulations to identify any legal barriers to contracting or delegating public service functions in land administration to private operators.	Score 1 if land is an eligible sector and the project concept involves a service that is eligible for PPP and if there are no legal prohibitions on the private sector assuming land administration service delivery responsibilities.
2. Can existing legal or regulatory barriers to the project concept be overcome through legislative reform?	Evaluate whether legislative reform could ameliorate legal and regulatory obstacles to implementing land PPPs, or whether there would need to be additional reforms undertaken, such as constitutional amendments that necessitate referendums / plebiscites, for example.	Score 1 if legislative amendment is a viable course of action to remove legal and regulatory obstacles.
3. Building on Question 3 and 4 of the Strategic Case, is there a clear institutional framework in place for the management of the project?	Evaluate whether there is a clear institutional framework governing the various parties involved in the project. Assess whether these parties have capacity to fulfil their role as outlined under this framework.	Score 1 if clear institutional framework with capacity is in place.
4. Is it likely that the project concept will result in negative environmental or social consequences?	Scrutinize the potential for the project concept to result in detrimental environmental or social impacts and assess whether mitigation measures have been incorporated in the concept design.	Score 1 if the project concept is unlikely to result in negative environmental or social impacts.

*Scoring guidance: If the answer to the question is yes, score 1. Otherwise, score 0.*



## 4. Financial Case

The Financial Case assesses all expected revenue streams of the land administration system, OPEX related to management of the land administration system, accounting for ongoing costs related to the project concept, and CAPEX expectations for the project concept. It is important to distinguish between the focus of the CAPEX, OPEX, and revenue assessments as either on the project concept or the land administration system more broadly.

This distinction is necessary because not all project concepts will involve significant capital investment, nor will all project concepts generate user-fee revenue. However, each of these project concepts would create OPEX obligations for the land administration system due to the costs of servicing these contracts. As such, the objective of the Financial Case can be understood as generating a preliminary picture of whether the costs of a project concept (CAPEX and/or OPEX) can be met through revenue generated through the land administration system, or whether external financing support may be required.

The Financial Case can be further quantified with the Project Internal Rate of Return (PIRR), which is a financial metric that informs decision-makers on whether a project is financially viable and could potentially be carried as a PPP. Due to information constraints at this preliminary stage, the PIRR does not consider the project concept's future financing structure or to whom future land administration fees may accrue. It is best understood as a general metric that informs decision-makers on the overall financial viability of a country's land administration system and services considering expected revenues.

Given the project will be in the preliminary development and conceptualization phase, the use of indicative financial variables, such as CAPEX and OPEX, will suffice. The Financial Analysis Worksheet presented in Appendix Four will assist in determining the PIRR for projects under consideration. Please refer to the Operating Guidelines for Financial Analysis which are also set out in Appendix Four for instruction on how to use the worksheet. The findings from this worksheet will inform the responses in the Financial Case.

It is also critical to consider the affordability of the project (both in terms of available budgets and for users) when assessing this case. To do so, governments must consider if there are sufficient resources available to meet the fiscal costs of the proposed PPP project. This is separate from the VfM analysis, which involves the assessment of whether a PPP may offer better value for the public than traditional public procurement methods. The two are different and are not interdependent – a project may demonstrate VfM and not be affordable.

In this Case, the following questions should be addressed in line with the interpretative guidance provided (the Financial Analysis Worksheet should be used during scoring):

**OF Figure 17:** Financial Case Questions and Guidance

Questions	Interpretative Guidance	Scoring Guidance
1. Can the capital investment costs required to operationalize the project concept be estimated?	Examine whether the project concept requires an affordable level of capital investment, such as developing a new or redesigning an existing IT system.	Score 1 if CAPEX costs are viable considering budgetary constraints.
2. Can the annual operating costs of the land administration system be quantified?	Analyze the expected OPEX requirements of the land administration system accounting for specific funding requirements of the project concept. While there may not be CAPEX requirements for certain types of land PPPs, such as outsourcing contracts, the costs of servicing such contracts is an OPEX obligation that is directly related to the broader costs of the entire land administration system that must be considered. If assessors cannot distinguish these costs, then use 10% of CAPEX as a benchmark, as in the financial model.	Score 1 if OPEX costs are viable considering budgetary constraints.
3. Can the future and expected land administration transactions, as well as its tariffs and fees, be quantified to generate preliminary revenue estimates?	<p>Calculate revenues expected to be generated under the land administration system with specific focus on the results of the LA RA that will have been previously conducted. The focus of this assessment is on revenues generated by the entire land administration system, rather than just those through the project concept.</p> <p>When assessing this element, it is critical to take into consideration whether the governments have the required public funds to cover the fiscal commitments of the PPP project, if applicable. Users must also be willing and able to pay the fees required as part of this revenue assessment. These issues are critical and must be examined at great depth as the project continues to proceed through the project development stages of the PPP life cycle.</p>	Score 1 if revenues appear sufficient to cover CAPEX and OPEX costs associated with the project concept.
4. Is there an understanding of the main project concept risks and how these may affect the PPP in implementation?	Identify key financial risks related to the project concept that could impact on the assessment of financial viability related to CAPEX, OPEX, and revenue made in the preceding questions. Risks may include issues of demand, technical suitability, and a lack of private sector interest, among other concerns. Refer to the Risk Mitigation Guidance Matrix, Part III of PPPs in Land Administration.	Score 1 if the identified risks can be addressed by the responsible project stakeholders.

*Scoring guidance: If the answer to the question is yes, score 1. Otherwise, score 0.*

## 5. Commercial Case

The Commercial Case is focused on synthesizing the findings of the preceding Case assessments to evaluate the overall suitability of the proposed PPP model. This model may be one of the many available PPP models, ranging from a full concession, in which the PPP operator carries responsibility for designing and operating a land administration system, to a more tightly defined set of services delegated through a service or management contract.

This initial consideration will be indicative due to the gaps in key information and data but will help the decision-making process on whether a preferred PPP model for the proposed land administration project concept can be identified.

As part of the process, the PPP's payment mechanism, determining how the private partner will be paid, must be considered. This is primarily achieved through one of two options, or a combination of both:

- Land administration fees and charges ("user-pays")
- Government payments ("government-pays")

User-pays PPPs in land administration can be complicated and politically unpopular as existing payment levels may increase as a result of PPP implementing, resulting in public dissatisfaction. Depending on the context of the transaction, user-pays payment schemes can be structured in a variety of ways, however, and can be developed to ensure user costs are in line with willingness/ability to pay. A government pays PPP modality may face less pushback from both the government and general public as it is less disruptive to existing service fees and charges. External donor support (for example, viability gap funding) can also be used to lower costs covered by the private or public partners and enable a more palatable fee structure in certain cases, such as when first registration is bundled into a concession on building/operating a land information system.

In most circumstances a user-pays arrangement is preferable as this removes the financial burden of service delivery off the public sector. To counteract the potential for public pushback, there must be detailed contractual restrictions on allowable fee increases to prevent private operators from improperly escalating land administration charges and undermining popular support for the PPP.

In this Case, the following questions should be addressed in line with the interpretative guidance provided:

**OF Figure 18:** Commercial Case Questions and Guidance

Questions	Interpretative Guidance	Scoring Guidance
1. Is the selected project concept structure the most appropriate to implement the desired land administration reform?	Evaluate, considering the results of the preceding Case assessments, whether the nominated project concept structure, both technically and financially, appears suitable for implementation.	Score 1 if the project concept structure is the most suitable approach based on available information.
2. Are the potential benefits and shortcomings of the proposed PPP model clear?	Scrutinize the project concept in order to identify any potential “pros and cons” of the proposed land PPP. These relative merits and deficiencies of the project concept will be important during subsequent stages of project development or concept re-design, depending on the outcome of the CVA scoring.	Score 1 if the potential benefits and shortcomings of the project concept can be identified.
3. Would the project concept be financially feasible when structured through a “user-pays” mechanism?	Examine whether the project concept can be funded through a user-pays mechanism, or whether some government support through targeted subsidies / donor funding may be required to make the project feasible. Not all land PPPs will be able to be structured through a user-pays arrangement, in which case external financial support may be required.	Score 1 if the project concept can be funded through a user-pays mechanism.
4. Would the project concept be financially feasible when structured through a “government-pays” mechanism?	Analyze whether a government-pays approach is feasible as an alternative to cover expected project concept implementation costs. Certain external financial support can be considered during this analysis.	Score 1 if budgetary constraints allow for a government-pays mechanism.
5. Is there an existing market for private firms that may be interested in supporting the implementation of the project concept?	Assess the market for private sector companies that may be interested in providing the services required under the project concept.	Score 1 if there are multiple suitably qualified and potentially interested firms capable of providing the required services.

*Scoring guidance: If the answer to the question is yes, score 1. Otherwise, score 0.*

## Summary

The scoring results of these Five Cases provide an instructive preliminary analysis on whether the proposed land administration reform project concept can be undertaken as a viable PPP. In applying these Five Cases it is possible to identify potential design deficiencies that may require further consideration or the identification of alternative structuring options.

For example, if the financial viability of the project concept is in doubt, considerations on how the government can financially contribute or incentivize private sector involvement will be necessary. It will also be necessary to assess whether the government could afford such expenditures, or whether donor funding may be available.

Assessing the potential PPP from a holistic perspective and applying the Five Cases renders this first assessment highly informative, laying the groundwork for the project concept to proceed to business case, prefeasibility, and feasibility studies. Completing this CVA scoring does not substitute such assessments. Rather, it informs users on whether a project concept is ready to proceed to the next stages of the Project Preparation phase under the PPP lifecycle, as elaborated upon in OF Figure 1.

## Decision Tree and Project Concept Readiness Scorecard

Presented below is a graphical illustration of the decision tree provided through the Five Cases in the CVA Tool.

## OF Figure 19: Flowchart of CVA Tool Use

### Strategic Case

1. Can the main challenges associated with delivering land administration functions and systems be described?
2. Can the project concept be defined and structured to support specific service delivery reforms?
3. Can the primary government stakeholders that will be impacted by implementation of the project concept be identified?
4. Can the main roles, responsibilities, and obligations of government agencies supporting the project concept be identified?
5. Can the public need for land administration functions related to the project concept be estimated over the short-, medium-, and long-term?
6. Does the project concept align with existing national, regional, local, and sector plans?

### Economic Case

1. Can the project concept's economic benefits be described qualitatively?
2. Is the project concept expected to lower the time and cost of delivering land administration services?
3. Is the project concept expected to generate business opportunities for local companies to support service delivery improvements?

### Management Case

1. Are there any legal or regulatory obstacles to the project concept under PPP legislation? Are there any legal or regulatory barriers to the project in land sector-specific legislation?
2. Can existing legal or regulatory barriers to the project concept be overcome through legislative reform?
3. Building on Question 3 and 4 of the Strategic Case, is there a clear institutional framework in place for the management of the project?
4. Is it likely that the project concept will result in negative environmental or social consequences?

### Findings from Initial Three Cases

#### Financial Case

1. Can the capital investment costs required to operationalize the project concept be estimated?
2. Can the annual operating costs of the land administration system be quantified?
3. Can the future and expected land administration transactions, as well as its tariffs and fees, be quantified to generate preliminary revenue estimates?
4. Is there an understanding of the main project concept risk and how these may affect the PPP in implantation?

#### Commercial Case

1. Is the selected project concept structure the most appropriate to implement the desired land administration reform?
2. Are the potential benefits and shortcomings of the proposed PPP model clear?
3. Would the project concept be financially feasible when structured through a "user-pays" mechanism?
4. Would the project concept be financially feasible when structured through a "government-pays" mechanism?
5. Is there an existing market for private firms that may interested in supporting the implementation of the project concept?

### Final Decision on Initial Viability of Concept

Progress with Project Development

Return to project Concept Design

### Disclaimer

This assessment tool is for use as part of the Operational Framework and provides a rapid early-stage assessment for the preliminary viability of land administration PPP project concepts. This assessment neither substitutes nor removes the need for a detailed financial analysis as the project proceeds in the PPP lifecycle. Results for this tool should be kept confidential and should be shared on a need-to-know basis.

# OPERATIONAL FRAMEWORK APPENDICES

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# APPENDIX ONE DETAILED READINESS ASSESSMENTS TOOLS

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## PPP READINESS ASSESSMENT

The PPP Readiness Assessment includes three evaluation areas. Guidance on what each area pertains to, why it is important, and how it can be evaluated is provided below.

### OF Figure 20: PPP RA Evaluation Areas

Evaluations Areas	Guidance
<p><b>A - Legal, Regulatory, and Institutional Framework</b></p>	<p>An established legal, regulatory, and institutional framework is a fundamental pre-requisite to successfully implementing PPPs, regardless of the sector. Before contemplating the implementation of PPPs to reform a jurisdiction's LAS, it is first necessary to demonstrate the existence of such a framework, as well as its overall effectiveness in providing the parameters within which previous PPP projects have been design, implemented, and managed. This framework should not only be composed of an overarching PPP Law or Act or similar legislation, but it should also be supplemented by Regulations and/or Guidelines that provide both public and private actors, along with civil society, confidence as to the implementation of the Law or Act. These supporting instruments are critical to upholding foundational principles of probity, transparency, and an elimination of corruption in the disbursement of public funds. Finally, no legal and regulatory framework is complete without a hierarchical and efficient institutional allocation of roles and responsibilities of relevant public agencies. This institutional system provides the pragmatic mechanism through which the PPP Law or Act and Regulations and/or Guidelines are implemented in practice.</p> <p>In order to further explore these issues, the RA Scorecard poses the following questions:</p> <ul style="list-style-type: none"> <li>• Is there an established PPP legal framework, which has demonstrated success in managing previous PPPs in-country?</li> <li>• Is there established PPP Regulations and Guidelines in place, supporting the broader PPP framework and legislation?</li> <li>• Is there a clear and established institutional framework, defining the roles and responsibilities of various public sector actors in relation to PPPs?</li> </ul> <p>Where a Land PPP is being considered at the sub-national level the RA addendum includes the following additional question:</p> <ul style="list-style-type: none"> <li>• Does the sub-national framework for PPPs align with the national laws and regulations in order to enable the implementation of a Land PPP?</li> </ul>
<p><b>B - Project Lifecycle</b></p>	<p>The "lifecycle" of a PPP project is established under the PPP Act or Law and Regulations and/or Guidelines. It is constituted of a sequential process of evaluations, reviews, assessments, and approvals or denials to progress to the next stage of concept development and design. A primary benefit of PPP vis-à-vis traditional public procurement methods is the rigorous analysis to which potential projects are subjected prior to approval to tender being granted. Consequently, it is critical to evaluate foundational questions as to the efficacy and enforcement of the PPP lifecycle in countries considering the implementation of a Land PPP. The results of this inquiry will provide a comprehensive understanding of the procedural requirements involved prior to a project being considered viable against a multitude of criteria. Of importance is the need for clear requirements and procedures involved to ensure identified projects align with government priorities in order to screen out those that do not. Given the need for private investment to operationalize a PPP concept, it is a pre-requisite for governments to undertake market sounding and investor engagement activities. This enables an assessment</p>

Evaluations Areas	Guidance
	<p>of market interest in a given investment opportunity, while also providing an avenue to generate a competitive market through information sharing. The existence and requirements of technical, financial, legal, economic, fiscal, environmental, and social analyses is also of critical importance to ensuring only viable projects proceed to implementation. Such projects must generate VfM, be tendered in a transparent and competitive manner, and entail significant risk sharing between the public and private parties. Each of these conditions must be established prior to the initiation of procurement procedures. Finally, there must also be standardized approaches toward the formalization of PPP contracts that address key contractual questions related to the right, responsibilities, and obligations of all parties. This will provide for the amicable navigation of any disputes that may arise, which are expected over the course of a long-term and complex contractual relationship that is potentially impacted by numerous external factors.</p> <p>In order to further explore these issues, the RA Scorecard poses the following questions:</p> <ul style="list-style-type: none"> <li>• Are there clear and established procedures for identifying, screening, and prioritizing PPPs in line with national priorities and objectives?</li> <li>• Is there an established market sounding and private sector engagement strategies in place for PPP projects?</li> <li>• Are pre-feasibility studies, feasibility studies, and financial analyses required to be conducted during the appropriate stages of the PPP project lifecycle?</li> <li>• Are there established procurement processes for PPP projects, which focus on maximizing VfM and transparency, while minimizing the risk for corruption or political intervention? Is there an established approach to the development of PPP contracts, which outline the roles, responsibilities, and obligations for all parties involved, as well as addressing pertinent and applicable safeguards?</li> <li>• Does the country have a history of and demonstrated capacity for completing PPP projects successfully under the existing framework?</li> </ul> <p>Where a Land PPP is being considered at the sub-national level the RA addendum includes the following additional question:</p> <ul style="list-style-type: none"> <li>• Do sub-national project development and procurement processes, systems, and procedures align with those established at the national level?</li> </ul>

### C - Public and Private Roles and Responsibilities

The successful implementation of PPPs requires technical expertise, invested capital, and a willingness to innovate by the private party. However, government also plays a critical role in whether the PPP implementer can execute its mandate. Specifically, without long-term political support for a PPP reform agenda projects are often doomed to fail from the outset or during implementation. This support is required not only at the highest levels of government, but also at the institutional level where private operators must receive on-the-ground support from dedicated management units in relevant line ministries. Additionally, implementing a successful PPP projects requires an effective design with clear and pragmatic project parameters. Serious design flaws that are not identified early in the project appraisal process will commonly result in project failure, or an inability to meet specific performance requirements. Overcoming such obstacles before they materialize requires that, where internal capacity is lacking, external technical advisors are engaged to provide specialized support in the design, evaluation, transaction, and management phases of a PPP project.

In order to further explore these issues, the RA Scorecard poses the following questions:

- Is there a clear political will and support behind the use of PPPs, with appropriate institutional measures for enhancing understanding of the mechanism among the government entities?
- Has there been external technical support for PPPs provided in the past? Is there plans for additional support to be provided in the future?

Where a Land PPP is being considered at the sub-national level the RA addendum includes the following additional question:

- Is the sub-national entity enabled and capable to participate and fulfil its role and responsibility as part of a Land PPP?

## PPP RA Scorecard

### A - Legal, Regulatory, and Institutional

	Question rationale and information sources	Guidelines for scoring	Score (Desk review)	Basis for Rating	Score (after mission)
A. Legal, Regulatory, and Institutional	A1. Is there an established PPP legal framework, which has demonstrated success in managing previous PPPs in-country?	A clear PPP Law or similar legislation is in force, which defines the allowable scope, sectors, structures, sizes, terms, and other key elements of PPP projects.	4		
		A clear PPP Law or similar legislation is in force, which defines some, but not all, of the key PPP parameters such as scope, sector, structure, size, and term.	3		
		Procurement or public finance laws in place reference PPPs and provide some parameters regarding eligible projects.	2		
		There is no legislation in force, but a draft Act or Law has been proposed, which covers and references PPP and the parameters for applicable projects.	1		
		There is no legislation referencing or allowing for PPPs in force.	0		
	A2. Is there established PPP Regulations and Guidelines in place, supporting the broader PPP framework and legislation?	Established PPP Regulations and/or Guidelines are in force and are used in practice, supporting a clear and enforced PPP Law or Act.	4		
		Established PPP Regulations and/or Guidelines are in force, supporting a PPP Law or public finance legislation referencing PPPs.	3		
		Draft PPP Regulations and/or Guidelines are being proposed, supporting a PPP Law or public finance legislation referencing PPPs.	2		
		Draft procurement or public finance regulations or guidelines which reference and provide guidance on PPPs have been proposed.	1		
		There is no regulations or guidelines for PPPs in force.	0		

Question rationale and information sources	Guidelines for scoring	Score (Desk review)	Basis for Rating	Score (after mission)
A. Legal, Regulatory, and Institutional  A3. Is there a clear and established institutional framework, defining the roles and responsibilities of various public sector actors in relation to PPPs?	A formal, clear, and established institutional framework, defining the roles, responsibilities, and lines of communication between the various government entities involved in PPPs, is in place and practiced. A PPP Unit, or similar entity, is in place.	4		
	A formal institutional framework is in place, which partially defines the overarching roles, responsibilities, and lines of communication between the various government entities involved in PPP. Centralized oversight and coordination of PPPs is to some extent embedded in an involved entity.	3		
	An informal institutional framework, which defines to some extent the overarching roles, responsibilities, and lines of communication between the various government entities involved in PPP, is in place and practiced. There is some coordination of PPPs by an assigned body.	2		
	An informal institutional framework, which broadly defines some roles and responsibilities of government entities, is practiced haphazardly. There is no body entrusted with the oversight or coordination of PPPs.	1		
	There is no institutional framework, defining the roles and responsibilities of the government entities for PPPs. No oversight or coordination of PPPs is planned for or in place.	0		

## B – Project Lifecycle

	Question rationale and information sources	Guidelines for scoring	Score (Desk review)	Basis for Rating	Score (after mission)
B. Project Lifecycle	B1. Are there clear and established procedures for identifying, screening, and prioritizing PPPs in line with national priorities and objectives?	A clear and formal screening criteria, methodology, and prioritization process is in place and is practiced, which is connected to government priorities and plans currently being implemented. A recognized and prepared PPP pipeline is tracked and developed in line with such approaches.	4		
		An informal screening criteria and methodology is in place and is practiced. The basis of this informal process is linked to overarching objectives established in government plans and priorities. A PPP pipeline is in place, with varying degrees of information for projects included on the list.	3		
		An informal screening criteria and methodology is in place and is practiced. This process is not linked to government objectives or priorities in accordance to national development plans.	2		
		An informal screening of projects is conducted but is not consistent and varies from project to project. There is no clear PPP pipeline being prepared or gradually developed by the government.	1		
		There are no screening methodologies, prioritization processes, or linkages to government planning when considering PPP projects.	0		

B. Project Lifecycle	Question rationale and information sources	Guidelines for scoring	Desk Review	Basis for Rating	Score (after mission)
	B2. Is there an established market sounding and private sector engagement strategies in place for PPP projects?	The government adopts a clear and defined approach to planned market soundings and private sector engagement strategies in relation to PPP projects in the pipeline and in development. This process includes both direct government activities and funding for third party assignments within this sphere, focusing on general opportunities and specific projects. Regular investment promotion is practiced, and the government actively participates in pertinent conferences, advertises investment opportunities in a systematic way, or other such signs of commitment to engaging with the private sector.	4		
		The government will approach planned market soundings and private sector engagement strategies in relation to PPP projects on a case-by-case basis. This process includes both direct government activities and funding for third party assignments within this sphere. The government conducts some investment promotion activities and the government occasionally participates in pertinent conferences, advertises investment opportunities in a systematic way, or other such signs of commitment to engaging with the private sector.	3		
		The government will undertake market sounding and investor outreach for PPP projects selected for bringing to market. Some investment promotion and early private sector engagement will occur before the procurement phase is launched.	2		
		The government will conduct some market sounding or investor outreach for PPP projects selected for procurement. Early activities related to market sounding and private sector engagement are not conducted.	1		
The government does not actively participate or fund market sounding activities or private sector engagement.		0			

B. Project Lifecycle	Question rationale and information sources	Guidelines for scoring	Score (Desk review)	Basis for Rating	Score (after mission)
	B3. Are pre-feasibility studies, feasibility studies, and financial analyses required to be conducted during the appropriate stages of the PPP project lifecycle?	The government requires a commercial and business case analysis, viability analysis, pre-feasibility study, feasibility study, and financial analysis for all PPP projects under consideration. This process is practiced in real-life.	4		
		The government requires a commercial and business case analysis, viability analysis, pre-feasibility study, feasibility study, and financial analysis for all PPP projects under consideration. This process is practiced for the most part, but not for all PPP projects under consideration.	3		
		The government undertakes a commercial and business case analysis, viability analysis, pre-feasibility study, feasibility study, and financial analysis for all PPP projects under consideration, or most of the noted analyses above, in some cases when considering PPP projects.	2		
		The government undertakes a up to three of the following analyses in a few cases when considering PPP projects: commercial and business case analysis, viability analysis, pre-feasibility study, feasibility study, and financial analysis for all PPP projects under consideration.	1		
		No pre-feasibility study, feasibility study, financial analysis, and other such assessments are required or conducted prior to commencing a PPP project.	0		



B. Project Lifecycle	Question rationale and information sources	Guidelines for scoring	Score (Desk review)	Basis for Rating	Score (after mission)
	B4. Are there established procurement processes for PPP projects, which focus on maximizing VfM and transparency, while minimizing the risk for corruption or political intervention?	Established procurement process for PPP projects are in force and are practiced in line with a clearly defined legislative and regulatory framework. The procurement process focuses on transparency and evaluation based on pre-defined and objective criteria in order to select the best bidder.	4		
		Procurement processes for PPP projects are in force and are practiced in line with the prevailing legislative and regulatory framework. The procurement process is for the most part transparent and applies evaluation criteria in the selection of the best bidder.	3		
		While the procurement process for PPP projects are in force, the processes are applied to most, but not all PPP projects under procurement. The procurement process shows some efforts toward transparency, while evaluation based on criteria in order to select the best bidder. The evaluation criteria appear to often be more subjective than objective or unclear in how it would be applied.	2		
		Procurement processes vary case-by-base and lack transparency and a focus on selecting the best bidder in accordance to VfM and other evaluation criteria.	1		
		No defined procurement processes for PPP projects are in force. No efforts towards promoting objective evaluation or transparency are apparent in the practices used previously.	0		

B. Project Lifecycle	Question rationale and information sources	Guidelines for scoring	Score (Desk review)	Basis for Rating	Score (after mission)
	B5. Is there an established approach to the development of PPP contracts, which outline the roles, responsibilities, and obligations for all parties involved, as well as addressing pertinent and applicable safeguards?	The government adopts a clear and established approach to PPP contracts, using standardized templates or clauses in order to ensure consistency, but with due consideration for the specific nature and context of the project in question. Contracts have built-in flexibility to accommodate changing environments and unforeseen risks. Contracts clearly and explicitly outline the roles, responsibilities, risks, and obligations of both the government and the private partner/s. Pro-poor, social, and environmental safeguards are including in the contracts.	4		
		The government generally adopts an established approach to PPP contracts, with occasional use of standardized templates or clauses in order to ensure consistency, with appropriate consideration of the specific project. Contracts outline the roles, responsibilities, risks, and obligations of both the government and the private partner/s. Pro-poor, social, and environmental safeguards are often included in the contracts.	3		
		The government changes approach to PPP contracts on a case-to-case basis, with an underlying understanding of key overarching tenets of PPP projects. Contracts for the most part outline the roles, responsibilities, risks, and obligations of both the government and the private partner/s. Pro-poor, social, and environmental safeguards have been included in the contracts in the past.	2		
		The government changes approach to PPP contracts on a case-to-case basis. Contracts partially outline the roles, responsibilities, risks, and obligations of the government and the private partner/s. Pro-poor, social, and environmental safeguards are not included in the contracts.	1		
There is no established approach to PPP contracts. Previous PPP contracts lack clarity, key definitions, and are ambiguous.		0			

B. Project Lifecycle	Question rationale and information sources	Guidelines for scoring	Score (Desk review)	Basis for Rating	Score (after mission)
	B6. Does the country have a history of and demonstrated capacity for completing PPP projects successfully under the existing framework?	The country has a substantive record of successfully closed PPP projects under the existing framework, including several projects which have reached completion in line with the age and maturity of the PPP program (for example, 10 projects in 10 years of a program). The government has a corresponding awareness and demonstrated a high degree of capacity for developing and managing PPPs accordingly.	4		
		The country has a record of successfully closed PPP projects under the existing framework, including a reasonable number of projects which have reached completion in line with the age and maturity of the PPP program (for example 7 projects in 10 years of a program). The government has some awareness and has demonstrated a medium degree of capacity for developing and managing PPPs accordingly.	3		
		The country has a record of successfully closing PPP projects under the existing framework, including at least a few projects which have reached completion in line with the age and maturity of the PPP program (for example, 3 to 5 projects in 10 years of a program) and several being implemented. The government has haphazard understanding and capacity regarding PPP development and management.	2		
		The country has not yet successfully closed a project under the existing framework, but several are currently consideration. Government understanding and capacity regarding PPPs are limited.	1		
		There have been no PPPs considered or implemented under the existing framework. There is no PPP understanding or capacity within the government.	0		

## C – Public and Private Roles and Responsibilities

Question rationale and information sources	Guidelines for scoring	Score (Desk review)	Basis for Rating	Score (after mission)
C1. Is the sub-national entity enabled and capable to participate and fulfil its role and responsibility as part of a PPP in land administration, as proven through a track-record of implementing and overseeing PPPs?	The government encourages the use of PPPs in appropriate contexts. There is general understanding of PPPs among government actor, which is supported by the dissemination of information on PPPs and internal and external capacity building initiatives.	4		
	The government views the use of PPPs in a positive sense when used appropriately. There is general understanding of PPPs among government actors, with a degree of dissemination of PPP knowledge through programs or platforms.	3		
	The government is ambivalent towards the use of PPPs. There is general comprehension of the basics of PPPs among government actors. There is information on PPP available through public sector means for use by government actors.	2		
	The government generally views the use of PPPs in a negative light. There is little understanding of PPPs among government actors. There is limited information on PPP available through public sector means for use by government actors.	1		
	The government actively discourages and disapproves of the use of PPPs. There is little to no understanding of PPPs among government actors. There is no information available on PPP through public sector means for use by government actors.	0		

	Question rationale and information sources	Guidelines for scoring	Score (Desk review)	Basis for Rating	Score (after mission)
C. Public and Private Roles and Responsibilities	C2. Has there been external technical support for PPPs provided in the past? Is there plans for additional support to be provided in the future?	The government retains external technical advisors to support the PPP program. There have been past donor projects focusing on PPP and there are more planned for the future (where appropriate).	4		
		The government retains external technical advisors to support the specific PPP projects or initiatives on an as-needed basis. There have been some past donor projects focusing on PPP and there are more planned for the future (where appropriate).	3		
		Governments have used external technical advisors on one to two occasions to support PPPs. There have been some past donor projects focusing on PPP and there are more planned for the future (where appropriate).	2		
		There have been some past donor projects focusing on PPP and there are more planned for the future (where appropriate).	1		
		There has been no external technical support in relation to PPPs. There is no future support planned.	0		

### PPP RA Sub-Total

PPP Readiness Sub-Total	Score (Desktop Review)	Score (After Validation Mission)
	___/44	___/44

## PPP RA SUB-NATIONAL ADDENDUM

Included as an addendum to the RA is the Sub-National PPP assessment component. To include this Assessment Component within the primary PPP RA would negatively impact the final evaluation scoring to disadvantage those countries that prohibit sub-national PPPs. Consequently, this addendum is only intended for application in countries that adopt a decentralized approach toward PPPs implemented under the auspices of sub-national entities.

The Sub-National PPP Assessment Component adopts a scoring threshold of 70% that exceeds the 65% threshold utilized in the primary PPP RA. This elevated scoring benchmark is the result of challenges that face sub-national projects, which are either not faced or which pose less significant obstacles to projects on a national level. Primarily, these challenges include a lack of institutional resources, both human and financial, less experience implementing larger projects, and a greater number of involved stakeholders across different levels of government.

### A – Legal, Regulatory, and Institutional

	Question rationale and information sources	Guidelines for scoring	Score (Desk review)	Basis for Rating	Score (after mission)
A. Legal, Regulatory, and Institutional	A1. Does the sub-national framework for PPPs align with national laws and regulations to enable the implementation of a land PPP?	Established sub-national legislation, regulations, guidelines, and policies align with the national PPP framework, clearly allowing for the implementation of a PPP project in land administration.	4		
		Established sub-national legislation, regulations, guidelines, and/or policies align to a large degree with the national PPP framework, providing a foundation for enabling the implementation of a PPP project in land administration.	3		
		There is legislation, regulations, guidelines, and/or policies at the sub-national level which reflect principles of the national PPP framework, making PPPs in land administration possible.	2		
		Early-stage legislation, regulations, guidelines, or policies at the sub-national level reflect some principles of the national PPP framework, but do not lay out a clear path for implementing PPPs in land administration.	1		
		There is no framework on the sub-national level to align with the national framework and enable PPPs in land administration.	0		

## B- Project Lifecycle

	Question rationale and information sources	Guidelines for scoring	Score (Desk review)	Basis for Rating	Score (after mission)
B. Project Lifecycle	B1. Do sub-national project development and procurement processes, systems, and procedures align with those established at the national level?	The project development and procurement processes, systems, and procedures at all stages of the project lifecycle (from conception to screening to PFS to procurement) align with those mandated under the national framework and practiced when implementing PPPs. The process for PPPs implemented at the sub-national level is clear and defined.	4		
		Some of the project development and procurement processes, systems, and procedures at all stages of the project lifecycle (including at least some at the conception, screening, PFS, and procurement stages) align with those mandated under the national framework. The process for PPPs implemented at the sub-national level is relatively clear.	3		
		Some of the project development and procurement processes, systems, and procedures at all stages of the project lifecycle (including at least some at the conception, screening, PFS, and procurement stages) generally reflect those mandated under the national framework. The process for PPPs implemented at the sub-national level is not yet optimized and requires some reform.	2		
		There is limited alignment between the sub-national project development and procurement processes, systems, and procedures and those at the national level. There are certain defined or standardized project development processes followed at the sub-national level, but these are irregularly practiced or regulated. The process for PPPs implemented at the sub-national level requires large-scale reform.	1		
		There is no alignment between the sub-national project development and procurement processes, systems, and procedures and those at the national level. No defined or standardized project development processes are followed at the sub-national level and an entirely new framework needs to be developed.	0		

## C – Public and Private Roles and Responsibilities

	Question rationale and information sources	Guidelines for scoring	Score (Desk review)	Basis for Rating	Score (after mission)
C. Public and Private Roles and Responsibilities	C1. Is the sub-national entity enabled and capable to participate and fulfil its role and responsibility as part of a PPP in land administration, as proven through a track-record of implementing and overseeing PPPs?	Relevant sub-national entities are mandated and empowered to participate fully in PPPs and fulfil the roles and responsibilities falling under their purview. Sub-national entities have successfully overseen PPPs in the past.	4		
		Some sub-national entities are mandated and empowered to participate in PPPs and somewhat fulfil the roles and responsibilities which would fall under their purview. There has been some sub-national entity familiarity and experience with PPPs in the past.	3		
		Some sub-national entities can participate in PPPs. While capacity is limited, sub-national entities are aware of PPPs and demonstrate some capacity regarding managing similar procurement or project development processes.	2		
		Sub-national entities are limited in their ability and capacity to participate in PPPs. They have a limited awareness of PPPs and demonstrate some understanding.	1		
		Sub-national entities are not enabled to participate in PPPs and lack any capacity regarding understanding or participating in PPP projects.	0		

## Sub-national PPP RA Sub-Total

PPP Readiness Sub-Total	Score (Desktop Review)	Score (After Validation Mission)
	_/12 8.4 to pass (70% threshold)	__/12



## LAND ADMINISTRATION READINESS ASSESSMENT (LA RA)

The Land Administration Readiness Assessment (LA RA) includes two evaluation areas. Guidance on what each area pertains to, why it is important, and how it can be evaluated is provided below.

Evaluation Areas	Guidance
<p><b>A –Land Sector Scoping</b></p>	<p>The availability of reliable data and transparency within the LA sector is critical for the scoping of a land PPP project concept.</p> <p>Given the donor experience in many countries, a major constraint is availability and/or reliability of data about LA services, including transactions. Without this information, it is difficult to ascertain the number of transactions, average price per transaction etc. which affect private sector interest. Therefore, it would be important for LA RA users to engage in data collection (basic market and other relevant indicators) to test availability as well as to speak with private sector participants/researchers in real estate sector to understand the perceptions of the reliability of data, whether it is market indicators or parameters like coverage, recognition of rights etc.</p> <p>In addition to availability and reliability, transparency in the LA sector is also an important consideration. For transparency, the evaluation area draws on the: (a) transparency of information index, which is part of the Quality of Land Administration<sup>4</sup> assessment under the Registering Property stream of the Doing Business Index;<sup>5</sup> (b) the availability of clear schedule of fees (sometimes measured by LGAF but could be independently assessed); and (c) whether informal payments are discouraged.</p> <p>Finally, it is recommended to look at the legal certainty of rights and transactions in the target jurisdiction as well as to ascertain the liability associated with land disputes, both of which could impact private sector interest in the LA sector. The land dispute resolution index of Doing Business's Quality of Land Administration for Registering Property serves as a good proxy to measure the target jurisdiction's performance on these two metrics. evaluation area draws on the Doing Business Index's assessment of Quality of Land Administration under the Registering Property stream. Two specific areas are assessed for the LA RA: 1) transparency of information index, and 2) land dispute resolution index, which is a proxy for legal certainty of rights/transactions and guarantees protecting land market transactions. With these two areas in mind, the LA RA seeks to explore the following questions</p> <ul style="list-style-type: none"> <li>• Is the data on land administration and land market available (e.g. coverage, transactions etc.)?</li> <li>• What is the private sector stakeholders' (e.g. brokers) and researchers' perception of the reliability of data on land administration<sup>6</sup> and land market?</li> <li>• How does the target jurisdiction score on transparency of land administration and availability of key information and data? (Use DB Transparency of Land Administration Index score)</li> <li>• Is there a clear schedule of fees publicly available? (Use LGAF, if available, or assess)</li> <li>• Are informal payments discouraged? (Use LGAF, if available, or assess)</li> <li>• How does the target jurisdiction rank in terms of guaranteeing land tenure security and land market transactions? (Use DB Land Dispute Resolution Index score)</li> </ul>

<sup>4</sup>The methodology for Doing Business's Quality of Land Administration can be accessed here: <https://www.doingbusiness.org/en/methodology/registering-property>

<sup>5</sup>Doing Business rankings and scores are available for 189 economies around the world and can be accessed online. It is important to note that a key assumption for the Doing Business Index is that the transacting parties "are located in the periurban (that is, on the outskirts of the city but still within its official limits) area of the economy's largest business city. For 11 economies the data are also collected for the second largest business city."

<sup>6</sup>Additionally, if available, the LGAF score for "Land Governance Indicator 19. Reliability: registry information is updated and sufficient to make meaningful inferences on ownership" can be used to ascertain the reliability of land administration data.

<p><b>B – Land Administration Enabling Environment</b></p>	<p>For the successful implementation of a land PPP, government capacity and buy-in is critical for the success of the proposed transaction. Specifically, without long-term political support for a PPP reform agenda projects in any sector are often doomed to fail from the outset or during implementation. Government support remains critical in terms of both political champions but also at the institutional level at the executing agency where private operators must receive on-the-ground support and collaboration from dedicated management units in relevant line ministries. Therefore, clarity at the institutional level on the public sector side is vital to help assign responsibilities to public sector entities. Additionally, the capacity of the executing agency in the land sector will also determine the success of a potential PPP concept.</p> <p>The LA RA questions to consider for this evaluation area are:</p> <ul style="list-style-type: none"> <li>• Is there a clear institutional structure for land administration functions (both geographic and legal functions) in the target jurisdiction?</li> <li>• Are policy formulation, implementation, and arbitration properly separated? (Use LGAF, if available, or assess)</li> <li>• Do the responsibilities of the ministries and agencies dealing with land overlap (horizontal overlap)? (Use LGAF, if available, or assess)</li> <li>• Do administrative functions in the land sector overlap (vertical overlap)? (Use LGAF, if available, or assess)</li> <li>• With respect to the executing agency, is there history of procurement of services from private sector for delivery of land service delivery streams such as IT outsourcing and surveying and mapping?</li> </ul>
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## LA RA Scorecard

### A – Land Sector Scoping

	Question rationale and information sources	Guidelines for scoring	Score (Desk Review)	Basis for Rating	Score (after mission)
A. Land Sector Scoping	A1. Is the data on land administration and land market activity available? For example, land agency annual reports, real estate market analysis reports, academic research papers, government or donor funded consultancy reports.	Data on land administration and land market is easily available (online or otherwise)	4		
		Data on land administration and land market is available with some effort	2		
		Data on land administration and land market is inconsistent or not available	0		
	A2. What is the private sector stakeholders' (e.g. brokers) and researchers' perception of the reliability of data on land administration <sup>7</sup> and land market? (Potential source: market)	Data on land administration and land market is perceived as very reliable	4		
		Data is somewhat reliable with equal confidence in land market and land administration data	3		
		Data is somewhat reliable with more confidence in land market data than land administration data	2		
		Data is somewhat reliable with more confidence in land administration data than land market data	1		
		Reliable data on land administration and land market is not available	0		

<sup>7</sup>If available, the LGAF score can be used to ascertain the reliability of land administration data. But it is important to note that the LGAF only looks at completeness of cadastre and does not give a sense of transaction-related data.

Land Governance Indicator 19. Reliability: registry information is updated and sufficient to make meaningful inferences on ownership

#### REGISTRY/CADASTRE INFORMATION IS UP-TO-DATE.

**A = 4:** More than 90% of the ownership information in the registry/cadastre is up-to-date.

**B = 3:** Between 70% and 90% of the ownership information in registry/cadastre is up-to-date.

**C = 2:** Between 50% and 70% of the ownership information in registry/cadastre is up-to-date.

	Question rationale and information sources	Guidelines for scoring	Score (Desk Review)	Basis for Rating	Score (after mission)
A. Land Sector Scoping	A3. How does the target jurisdiction score on transparency of land administration and the availability of information related to fees, performance standards, complaints handling, etc.?	<i>Use Doing Business Transparency of Information Index score to assess transparency of land administration. Highlight those components of the Index that received '0' for scoring.<sup>8</sup></i>	Scale of [0-6]		
	A4. Is there a clear schedule of fees publicly available? (Use LGAF <sup>9</sup> , if available, or assess)	A: A clear schedule of fees for different services is publicly accessible and receipts are issued for all transactions.	4		
		B: A clear schedule of fees for different services is not publicly accessible, but receipts are issued for all transactions.	3		
		C: A clear schedule of fees for different services is publicly accessible, but receipts are not issued for all transactions.	2		
		D: A clear schedule of fees for different services is not publicly accessible and receipts are not issued for all transactions.	0		
	A5. Are informal payments discouraged? (Use LGAF, if available, or assess) <sup>10</sup>	A: Mechanisms to detect and deal with illegal staff behaviour exist in all registry offices and all cases are promptly dealt with.	4		
		B: Mechanisms to detect and deal with illegal staff behaviour exist in all registry offices but cases are not systematically or promptly dealt with.	3		
		C: Mechanisms to detect and deal with illegal staff behaviour exist in some registry offices.	2		
		D: Mechanisms to detect and deal with illegal staff behaviour are largely non-existent.	0		
	A6. How does the target jurisdiction rank in terms of guaranteeing land tenure security and land market transactions?	<i>Use Doing Business Land Dispute Resolution Index Score to assess protections against land disputes arising from fraud, corruption, and negligence.</i>	Scale of [0-8]		

D = 0: Less than 50% of the ownership information in the registry/cadastre is up-to-date.

<sup>8</sup>It would be important for the task teams to study the DB methodology to understand the underlying drivers of the ratings.

<sup>9</sup>Land Governance Indicator 21. Fees are determined transparently to cover the cost of service provision

<sup>10</sup>Ibid.

## B – Land Administration Enabling Environment

	Question rationale and information sources	Guidelines for scoring	Score (Desk Review)	Basis for Rating	Score (after mission)
B. Land Administration Enabling Environment	B1. Is there a clear institutional structure for land administration functions (both geographic and legal functions) in place and adhered to in the target jurisdiction?	There is a clear institutional structure for both geographic and legal functions that is in place and adhered to	12		
		Institutional structure for either geographic or legal functions is under reform	6		
		There is no institutional structure for both geographic and legal functions, or there is no adherence to regulated and mandated structure	0		
	B2. Are policy formulation, implementation, and arbitration properly separated? (Use LGAF <sup>11</sup> , if available, or assess)	A: In situations that can entail conflicts of interest or abuse (e.g. transfers of land rights) there is a clear separation in the roles of policy formulation, implementation of policy through land management and administration and the arbitration of disputes	4		
		B: In situations that can entail conflicts of interest or abuse (e.g. transfers of land rights) there is some separation in the roles of policy formulation, implementation of policy through land management and administration and the arbitration of disputes	3		
		C: In situations that can entail conflicts of interest or abuse (e.g. transfers of land rights) there is some separation in the roles of policy formulation, implementation of policy through land management and administration and the arbitration of disputes	2		
		D: In situations that can entail conflicts of interest or abuse (e.g. transfers of land rights) there is no clear separation in the roles of policy formulation, implementation of policy through land management and administration and the arbitration of disputes	0		

<sup>11</sup>Land Governance Indicator 26. Clarity of mandates and practice: institutional mandates concerning the regulation and management of the land sector are clearly defined, duplication of responsibilities is avoided, and information is shared as needed.

B. Land Administration Enabling Environment	Question rationale and information sources	Guidelines for scoring	Score (Desk Review)	Basis for Rating	Score (after mission)
	B3. Do the responsibilities of the ministries and agencies dealing with land overlap (horizontal overlap)? (Use LGAF <sup>12</sup> , if available, or assess)	A: The mandated responsibilities exercised by the authorities dealing with land governance are non-overlapping with those of other land sector agencies.	4		
		B: The mandated responsibilities of the various authorities dealing with land administration issues are defined with a limited amount of overlap with those of other land sector agencies but there are few problems.	3		
		C: The mandated responsibilities of the various authorities dealing with land administration issues are defined but institutional overlap with those of other land sector agencies and inconsistency is a problem.	2		
		D: The mandated responsibilities of the various authorities dealing with land administration are defined poorly, if at all, and institutional overlap and inconsistency is a serious problem.	0		
	B4. Do administrative functions in the land sector overlap (vertical overlap)? (Use LGAF <sup>13</sup> , if available, or assess)	A: Assignment of land-related responsibilities between the different levels of administration and government is clear and non-overlapping.	4		
		B: Division of land-related responsibilities between the different levels of administration and government is clear with minor overlaps.	3		
		C: Division of land-related responsibilities between the different levels of administration and government is characterized by large overlaps.	2		
D: Division of land-related responsibilities between the different levels of administration and government is unclear.		0			

<sup>12</sup>Land Governance Indicator 26. Clarity of mandates and practice: institutional mandates concerning the regulation and management of the land sector are clearly defined, duplication of responsibilities is avoided, and information is shared as needed

<sup>13</sup>Ibid.

B. Land Administration Enabling Environment	Question rationale and information sources	Guidelines for scoring	Score (Desk Review)	Basis for Rating	Score (after mission)
	B5. With respect to the executing agency, is there some level of established procurement and oversight capacity in place that has been developed via a history of engagement with private sector service providers in areas such as IT sourcing and cadastral surveying and mapping?	There is established history of engagement (procurement and oversight) with the private sector for delivery of certain services such as IT outsourcing and surveying/mapping	6		
		There is some experience with procurement and oversight of private sector service delivery	4		
		There is new or early experience with procurement and oversight of private sector service delivery	2		
		There is no experience with procurement and oversight of private sector service delivery	0		

#### LA RA Sub-Total

PPP Readiness Sub-Total	Score (Desktop Review)	Score (After Validation Mission)
	__/60	__/60

# APPENDIX TWO

# LAND PPP CONCEPTUALIZATION

# WORKSHEET

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The conceptualization of a land PPP is heavily dependent on the country context. It, therefore, needs careful consideration that should take into account the land agency's strategy and business plan as well as LAS needs. To facilitate the process of conceptualization, below is a non-comprehensive list of typical land PPP project concepts that can be considered:

1. Fully automated registry transaction processing services;
2. Semi-automated registry transaction processing services;
3. Manual processing of registry transactions (business process outsourcing), whether full or part of entire process;
4. Provision of title register and cadaster search services and production of related data products;
5. Computer Assisted Mass Appraisal of land and other immovable property for property taxation purposes;
6. Scanning and digitizing of legal instruments and other documents submitted in support of land registry transactions;
7. Development, maintenance, and ongoing upgrades and innovation in land registry and cadastral data management IT applications;
8. Field and/or back office works related to systematic land titling and first registration; and
9. Establish, maintenance, and operation of CORS networks and other geodetic and mapping infrastructure.

For other possible land PPP project concepts, refer to the Land PPP Entry Points, which is AF Figure 2 in the Analytical Framework.

Once a land PPP project concept has been identified, it can be analyzed with the three-step framework presented below.

<b>STEP ONE</b>	
<b>PPP Model Chosen</b>	
<b>Rationale Based on PPP Structure Guidance</b>	

STEP TWO		
Section	Guidance Questions	Response
Project Objective:	What issue does the project address? What does the project aim to achieve? Improved access to services? Reductions in times taken for processing?	
Targeted Services and/or Functions:	What services and/or functions does the project aim to provide?	
Stakeholders:	What stakeholders are involved? Consider the public sector, the private sector, financiers, operators, and users. What are their roles and responsibilities in the project?	
Project Demand:	Is there a demand for the services or functions offered by the project? Is the demand sufficient to justify the project?	
Economic Benefits:	What are the tangible economic benefits of this project? Who benefits? Are there potential economic issues posed by the project implementation?	
Legal and Regulatory Regime:	What legal and regulatory regime would govern the project? Does it adhere to these requirements?	
Environmental and Social Impact	What is the environmental and social impact of the project?	
Capital Investment Costs:	What are the estimated capital investment costs of the project?	
Operating Costs:	What are the estimated annual operating costs for the project? This would include the running of facilities, staff, and other such costs.	
Revenue Estimates	What is the estimated annual revenue of the project?	
Project Risks	What are the risks involved in the project? Consider the Risk Identification and Mitigation Guidance Tool in Section 6.	
Proposed PPP Structure	What PPP model would be used for this project? Consider the results of the PPP Structure Guidance Tool.	
STEP THREE		
Is there sufficient information and data in the Project Concept Template to move forward to the CVA?	YES	NO

# APPENDIX THREE

## CVA SCORECARD

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## PROJECT CONCEPT READINESS SCORECARD

### PROJECT CONCEPT DESCRIPTION

<b>Country:</b>	
<b>Background/Context:</b>	
<b>Proposed Technical Solution:</b>	
<b>Duration of PPP (Contract in Years):</b>	
<b>Proposed Technical Structure:</b>	
<b>Proposed Financial Structure:</b>	
<b>Key Stakeholders:</b>	

CASE ASSESSMENT	SCORE	SCORING RATIONALE
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#### 1. Strategic Case

I. Can the main challenges associated with delivering land administration functions and systems be described?		
II. Can the project concept be defined and structured to support specific service delivery reforms?		
III. Can the primary government stakeholders that will be impacted by implementation of the project concept be identified?		
IV. Can the main roles, responsibilities, and obligations of government agencies supporting the project concept be identified?		
V. Can the public need for land administration functions related to the project concept be estimated over the short-, medium-, and long-term?		
VI. Does the project concept align with existing national, regional, local, and sector plans?		
<b>Average Case Score:</b>		

#### 2. Economic Case

I. Can the main challenges associated with delivering land administration functions and systems be described?		
II. Can the project concept be defined and structured to support specific service delivery reforms?		
III. Can the primary government stakeholders that will be impacted by implementation of the project concept be identified?		
<b>Average Case Score:</b>		

### 3. Management Case

I. Are there any legal or regulatory obstacles to the project concept under PPP legislation? Are there any legal or regulatory barriers to the project concept in land sector-specific legislation?		
II. Can existing legal or regulatory barriers to the project concept be overcome through legislative reform?		
III. Can existing legal or regulatory barriers to the project concept be overcome through legislative reform?		
IV. Is it likely that the project concept will result in negative environmental or social consequences?		
<b>Average Case Score:</b>		

### Summary of Initial Assessment

### 4. Financial Case (Utilizing Findings from the Financial Spreadsheet)

I. Can the capital investment costs required to operationalize the project concept be estimated?		
II. Can the annual operating costs of the land administration system be quantified?		
III. Can the future and expected land administration transactions, as well as its tariffs and fees, be quantified to generate preliminary revenue estimates?		
IV. Is there an understanding of the main project concept risks and how these may affect the PPP in implementation?		
<b>Average Case Score:</b>		

### 5. Commercial Case

I. Is the selected project concept structure the most appropriate to implement the desired land administration reform?		
II. Are the potential benefits and shortcomings of the proposed PPP model clear?		
III. Would the project concept be financially feasible when structured through a "user-pays" mechanism?		
IV. Would the project concept be financially feasible when structured through a "government-pays" mechanism?		
V. Is there an existing market for private firms that may be interested in supporting the implementation of the project concept?		
<b>Average Case Score:</b>		

## Summary of Initial Assessment

**Average Case Score:**

## Progression

Present the sum of all the scores above. If higher than 70% of potential scoring, then the findings meet the threshold. If it is less, the project concept design should be revisited.

Reached Threshold

Move to next stage of project development

Under Threshold

Return to project concept design

# APPENDIX FOUR FINANCIAL ANALYSIS WORKSHEET

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## Operating Guidelines for Using the Financial Analysis Worksheet

This section provides guidance on how to use the Financial Analysis Worksheet in Excel that accompanies the CVA Scorecard that is intended for use when assessing the Financial Case.

These guidelines explain the mechanics of the Financial Analysis Worksheet, which is a supplementary tool informing the CVA. It presents a simplified financial model for use when undertaking a preliminary financial evaluation of a land administration PPP project concept.

To make the model user-friendly, the proposed approach uses two worksheets:

### OF Figure 21: Overview of Spreadsheets

#### 1. Input Sheet

Example of Input Sheet

No	Item	Unit	Value
	<b>General</b>		
<b>A</b>	Growth rate transaction	% /year	<b>4%</b>
<b>B</b>	Project implementation	Year	<b>1</b>
<b>C</b>	Concesion duration	Year	<b>20</b>
	<b>CAPEX</b>		
<b>D</b>	First registration	\$	<b>5,000,000</b>
<b>E</b>	Offices set up	\$	<b>1,000,000</b>
<b>F</b>	Set up IT system	\$	<b>5,000,000</b>
	Total CAPEX	\$	11,000,000
	<b>OPEX</b>		
	Operating cost land registration system	% of total CAPEX	10%
	Operating cost land registration system	\$/year	1,100,000
	<b>Land registration</b>	#	
<b>H</b>	Annual land transactions	#	<b>1,500</b>
<b>E</b>	Current fees/leives per transaction	\$/Transaction	<b>2,000</b>
<b>F</b>	Renueves land transaction fees	\$/year	3,000,000



## 2. Financial Model and Project Internal Rate of Return (PIRR) Sheet

Example of Financial Model and PIRR Sheet\*

No.	Cashflow Out		Cashflow In Transaction feer/leives	Cashflow Flow balance	Project IRR
	CAPEX	OPEX			
0	-11.000.000			-11.000.000	22%
1		1,100,000	3,000,000	1,900,000	
2		1,100,000	3,120,000	2,020,000	
3		1,100,000	3,244,800	2,144,800	
4		1,100,000	3,374,592	2,274,592	
5		1,100,000	3,509,576	2,409,576	
6		1,100,000	3,649,959	2,549,959	
7		1,100,000	7,795,795	2,695,957	
8		1,100,000	3,947,795	2,847,795	
9		1,100,000	4,105,707	3,005,707	
10		1,100,000	4,269,935	3,169,935	

\*Year 11 to 20 have been excluded due to space issues

The cells marked in blue are input cells that can be changed. The other cells are calculation cells that the user should not alter. **The objective of using the model is to assess if the land administration project concept is financially viable to be carried out as a PPP, based on the information available at the concept stage.** As a benchmark for assessing this viability, the model uses the PIRR.

In a simplified form, the model asserts that a project concept with PIRR higher than 10 percent suggests a foundational level of financial viability, which can be further improved through financing engineering approaches (i.e. commercial loans and equity to finance CAPEX requirements). **The PIRR of 10% is used as a common assumption, implying the project's attractiveness in many contexts. The exact threshold here, however, may vary across countries and should be selected on a case-by-case basis.**

Underlying this financial viability analysis is the government partner and its potential financial contributions. Many PPP projects can attract private sector interest, depending on the government's willingness to offer sound financial terms to the private partner. If project revenues are not sufficient to entice the private partner, the government offers financial contributions and pays a baseline of the revenues required to attract interest.

If the PIRR is already low (this model uses a threshold of 10 percent as an illustrative example), there is limited room for fine-tuning or improvement through financial engineering. The conclusion is then that the project concept is unlikely to be financially viable and external assistance is required.

Traditionally, the financial structure of a PPP can be divided into two categories:

- **A user-pays PPP**, in which the actual fees and levies for the land administration project generate a PIRR of 10 percent or above.

or

- **A government pays PPP**, in which the PIRR (calculated with actual fees and levies) is less than 10 percent and financial contributions from the government are required to boost PIRR.

The figure below summarizes this decision-making process:

**OF Figure 22:** PIRR Assessment Overview

Indicative PIRR	Financial viability-actual end users fees	Government financial contributions required
>10%	Viable	No
<10%	Challenging	Yes

This threshold has been adopted as a PIRR of 10% indicates that the project concept can be feasibly structured under a user-pays PPP. **The 10% rate is the Discount Rate (DR), which does not account for any of the project risks. As the CVA assesses project concepts at an early stage, the 10% figure is used as an assumption, based on the rates common to similar projects of this kind. The exact number used here, however, will depend on the exact country and project risks context.**

The threshold, however, is an assumption and should be seen more as a broad metric that can be further examined with an equity IRR at a later stage of assessment. However, because this tool assesses project concepts at a preliminary stage, the tool does not recommend using the equity IRR. This is due to the early stage project concept design, high level of uncertainty regarding factors remaining unconfirmed,

and unknown information stemming from the lack of available information, such as equity versus loans.

As such, the broad measurement of PIRR is recommended as a mechanism to inform project structuring as a user-pays or government-pays PPP. A PIRR of less than 10 percent suggests that the project is not financially feasible using user charges only.

Project feasibility can be improved (even with a negative PIRR) through government payment structures. Such approaches can be either upfront (viability gap funding), ongoing (through availability payments), or targeted financial support (subsidies). The approval process for government payments, however, is often lengthy, uncertain, and contentious process. The outcomes of previous PPP projects suggest that end-user pays PPP are more politically acceptable and can be implemented more efficiently.

Provided below is an applied example of the two worksheets proposed under this financial tool. This example has been developed envisioning a concession model for full-suite land administration services. While this example is instructive, it is highly likely land PPPs will take the form of service contracts to provide specific land administration functions, such as cadastral mapping and records digitizing, for example. Under such contracts it is likely that CAPEX, OPEX, and revenue generation will be limited to the terms of the contractual agreement.

Consequently, it is important to note that the example of the two worksheets provided below is intended to be illustrative, rather than instructive. For this reason, the assumptions provided in the example worksheets will be necessarily altered to suit the specific parameters of the project concept under consideration. This assessment is not intended to, nor could it, replace more detailed financial analyses that are undertaken at later stages of PPP project development.

The usage of these two worksheets is explained below.

## 1. INPUT WORKSHEET OVERVIEW

### I. General

The following figure provides a general overview of key general inputs for consideration:

**OF Figure 23:** General Inputs

Input Worksheet			
General			
<b>A</b>	Growth rate of transactions	%/year	<b>4%</b>
<b>B</b>	Project implementation	Year	<b>1</b>
<b>C</b>	Concession duration	Year	<b>20</b>

These inputs can be identified and calculated in the following manner:

- **Item A:** These items refer to the annual growth rate of land transactions or other key revenue sources. This item can be calculated using historic figures and data.
- **Item B:** For the purposes of this preliminary assessment, the model assumes that implementation of the land administration project concept is 1-year. This assumption is tight in a real-life scenario, but the model will use this assumption in a simplified financial model for the purposes of calculation at this nascent stage.

- **Item C:** The concession period is the period the model is considering for the private partner to assume responsibility for land administration functions and processes. This model uses a 20-year contract period for the purposes of this assessment, which aligns with other PPP contract durations in similar sectors. As a rule, the longer the duration of the contract, the likelier the project is to be financially viable. In a short contract period, the private sector partner is unlikely to recoup investments and make a reasonable financial return without significantly escalating fees charged to users. **The figure above is prepared based on a user-pays arrangement. This assumption can be altered, depending on the project concept being assessed.**

In order to extrapolate on the above and if the private partner is responsible for project investments, the following can be inferred:

- A longer contract period is likely to translate into a more financially viable project, and;
- Shorter contract periods are challenging and often result in financially non-viable PPP projects.

## II. CAPEX

The following figure provides a general overview of key CAPEX inputs for consideration:

**OF Figure 24:** CAPEX inputs

Input Worksheet			
CAPEX			
<b>D</b>	First registration	\$	<b>5,000,000</b>
<b>E</b>	Offices set-up	\$	<b>1,000,000</b>
<b>F</b>	IT set-up	\$	<b>5,000,000</b>
	<b>Total CAPEX</b>	\$	<b>11,000,000</b>

These inputs can be identified and calculated in the following manner:

- **Item D:** The first registration item refers to CAPEX obligations related to establishing rights and boundaries of land parcels. In some countries, this first registration has been completed at least to some extent. In this financial model, the calculations assume that the private partner is responsible for some degree for a portion of this first registration as part of the set contractual responsibilities. The user may change this assumption and simply leave the cell blank if this activity is not foreseen in the specific PPP project concept being considered.
- **Item E:** Land registration offices will usually be required for the projects under consideration. These spaces may include a headquarters and various field offices if, for example, the area of jurisdiction is large or dispersed on various islands. An estimate is required for total set-up costs. This estimate would include office furniture, equipment, computers, and other such items. This cost may also include acquiring project offices (purchase of land and buildings, as opposed to rent or assumption of the lease in existing government offices). If the offices are rented, this cost would then feed into the operating expenditures (OPEX), which is covered in the following section.
- **Item F:** Estimating the costs of a new IT system to support various land administration functions or processes can be a complex endeavour at the nascent project concept stage. Similarly, estimation of the costs of revamping existing legacy systems is often a difficult exercise. Price quotations from suppliers can provide estimates, as too can considerations for similar projects in relatively

similar contexts. The actual costs may differ, though, due to cost overruns driven by additional amendments or time overruns.

### III. OPEX

The following figure provides a general overview of key OPEX inputs for consideration:

**OF Figure 25:** OPEX inputs

Input Worksheet			
OPEX			
G	OPEX		
	Operating costs for land administration system	%/total CAPEX	<b>10%</b>
	Operating costs for land administration system	\$/year	<b>1,100,000</b>

These inputs can be identified and calculated in the following manner:

- **Item G:** Estimating annual OPEX for a land administration project concept is a challenging exercise. This item will mostly comprise staff salaries, but these can also be dispersed among the various involved actors, including ministries, notaries, municipalities, and other agents. Additional OPEX items include housing and office rentals, software licenses, and other running costs, such as utilities and miscellaneous office costs.

As this assessment tool will be used at the nascent project concept stage, the model has simplified this process to assume the OPEX as a percentage of CAPEX. At this level of project development, this approach is often adopted due to the lack of data and information. In line with other e-government projects, the model sets the annual OPEX at 10% of the estimated CAPEX.

### IV. Land Administration

The following figure provides a general overview of key land administration inputs for consideration:

**OF Figure 26:** Land Administration Inputs

Input Worksheet			
Land Administration			
H	Annual land transactions	No.	<b>1,500</b>
I	Current fees/levies per transaction	\$/transaction	<b>2,000</b>
J	Revenues from land transaction fees	\$/year	<b>3,000,000</b>

These inputs can be identified and calculated in the following manner:

- **Item H:** Based on the nature of the project concept, the number of land transactions will be the basis for a large portion of the private operator's revenue stream. The current number of annual land transactions can be extracted from various information sources. While it may not be available in an all-encompassing database, combining various data sources to calculate the historic number of land transactions in most countries should be possible.
- **Item I:** The current levies or fees per transaction can be calculated by adding the entire flow of often regulated fees that an end-user must pay to various actors. Various data sources and fee overviews will have to be consulted to arrive at an average fee level per transaction. An alternative approach is to calculate the average fees / transactions through calculations spanning several years. For example, the following formula may be used:
  - *Total fees/levies received divided by the total number of land transactions in any given year.*

It is important to note that in circumstances where a land PPP does not generate revenue of the nature described above, such as in a service contract, the revenue received source can be considered as compensation provided under the contract for services rendered.

## 2. FINANCIAL MODEL AND PROJECT INTERNAL RATE OF RETURN (PIRR) SHEET

The calculation cells in the financial model are linked to the Input Worksheet. The user does not need to change any cells. The model's output, the PIRR, is marked in bold and can be evaluated with the figure below:

**OF Figure 27:** Indicative PIRR Assessment

Indicative PIRR	Financial viability-actual end users fees	Government financial contributions required
>10%	Viable	No
<10%	Challenging	Yes

This approach has been adopted in line with the overarching purpose of the tool, which is to enable users to evaluate project concepts in the early design phase to decide whether to move forward with project development. The 10 percent threshold for the PIRR is a broad measure of a project concept's financial feasibility. These figures, however, are arbitrary and may change depending on the context. The exact thresholds should be during the first mission.

This threshold is based on international experiences in both transaction advisory and infrastructure finance. As this assessment tool is evaluating a specific project concept with limitations on available information or hard data, the financial model needs to be able to be applied to concept pieces with varying degrees of detail. Weighted Average Cost of Capital (WACC) allows for more detailed analysis, but at this early stage of the project concept development, such an approach will restrict users from assessing most projects concepts being considered due to the lack of information.

A low PIRR suggests that project concept requires financial augmentation in order to improve the underlying financial viability. For example, a low PIRR implied that there is a need to augment the current fees that the user-pays for land administration transactions or functions. Most likely, the government will have to supplement these user fees. Increasing the level of user fees to uplift the PIRR

is not recommended as this approach will most likely be met with substantial social resistance from the general public.

Attached in Excel format with images of the two sheets in the spreadsheet illustrated in the following figures.

**OF Figure 28:** Financial Analysis Illustrative Worksheet - Sheet 1

No	Item	Unit	Value
	<b>General</b>		
<b>A</b>	Growth rate transaction	% year	<b>4%</b>
<b>B</b>	Project implementation	Year	<b>1</b>
<b>C</b>	Concession duration	Year	<b>20</b>
	<b>CAPEX</b>		
<b>D</b>	First registration	\$	<b>5,000,000</b>
<b>E</b>	Offices set up	\$	<b>1,000,000</b>
<b>F</b>	Set up IT system	\$	<b>5,000,000</b>
	Total CAPEX	\$	11,000,000
	<b>OPEX</b>		
	Operating cost land registration system	%/total CAPEX	10%
	Operating cost land registration system	\$/year	1,100,000
	<b>Land registration</b>	#	
<b>H</b>	Annual land transactions	#	<b>1,500</b>
<b>E</b>	Current fees/leives per transaction	\$/Transation	<b>2,000</b>
<b>F</b>	Renueves land transaction fees	\$/year	3,000,000

OF Figure 29: Financial Analysis Illustrative Worksheet - Sheet 2

No.	Cashflow Out		Cashflow In Transaccion feer/leives	Cashflow Flow balance	Project IRR
	CAPEX	OPEX			
0	-11.000.000			-11.000.000	22%
1		1,100,000	3,000,000	1,900,000	
2		1,100,000	3,120,000	2,020,000	
3		1,100,000	3,244,800	2,144,800	
4		1,100,000	3,374,592	2,274,592	
5		1,100,000	3,509,576	2,409,576	
6		1,100,000	3,649,959	2,549,959	
7		1,100,000	7,795,795	2,695,957	
8		1,100,000	3,947,795	2,847,795	
9		1,100,000	4,105,707	3,005,707	
10		1,100,000	4,269,935	3,169,935	
11		1,100,000	4,440,733	3,340,733	
12		1,100,000	4,618,362	3,518,362	
13		1,100,000	4,803,097	3,703,097	
14		1,100,000	4,995,221	3,895,221	
15		1,100,000	5,195,029	4,895,221	
16		1,100,000	5,402,831	4,302,831	
17		1,100,000	5,618,944	4,518,944	
18		1,100,000	5,843,701	4,743,701	
19		1,100,000	6,077,450	4,799,450	
20		1,100,000	6,320,548	5,220,548	





# RISK REFERENCE MATRIX

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Part III of PPPs in Land Administration

# RISK REFERENCE MATRIX

This section presents the Land PPP Risk Reference Matrix as Part III of the Knowledge Product on Public-Private Partnerships (PPPs) in Land Administration.

The following matrix presents 28 high-level risks for PPPs in land administration across six categories:

1. Political and Governance
2. Macroeconomic and Fiscal
3. Legal and Institutional
4. Financial and Commercial
5. Contractual and Technical
6. Social

This list provides an indication of key areas of consideration for government agencies and entities, as well as development partners, considering a land PPP project concept. The risks presented can be considered as 'blended risks' that stem from both the land sector and the PPP procurement process, rather than simply 'incremental risks' that affect only the PPP procurement aspects in land administration. This was done to capture an integrated view of risks that may affect the design or implementation phase of a potential land PPP. The matrix also shows which party/parties will be most affected by the respective risks and offers some mitigation considerations.

It is also important to note that the risk analysis and mitigation considerations presented here are not comprehensive as many risks and mitigation measures will be context-specific to the assessed project concept. Some of these risks may interact with each other (e.g. an increase in fee would affect the affordability and, by extension, the demand for land services) and these compounded effects may need to be considered and planned for in the specific context of the project concept under consideration. As such, further risk mitigation and management analysis will be required if the project moves forward within the PPP project lifecycle.

To the extent possible, the risk mitigation measures should be embedded in the PPP contract and the overall structure of the project itself (for example, addressing termination for default risks through contractual stipulations regarding warranties and step-in rights).

There are no one-size-fits-all solutions. Only in-depth analysis of the context and concept of the PPP under consideration can determine the measures that are appropriate. The results of the pre-feasibility study and feasibility study, two key steps in the PPP project life cycle, can provide the key information required to inform the detailed and careful development of the PPP contract and structure, inclusive of the appropriate risk mitigation measures.

This risk analysis also reveals insights from other sectors that may provide guidance to risk mitigation in land administration. Inputs from the project stakeholder consultation<sup>1</sup> in Dubai (October 2018) have been included in this Risk Reference Matrix, along with an identification of the key stakeholders involved for each risk (the government, the private sector (i.e. land PPP operator), and citizens (whether they currently use land administration services or plan to use them in the future).

<sup>1</sup>As part of this knowledge product, the World Bank organized three stakeholder consultations comprising participants from the public and private sectors, donors, and academia. These consultations took place in: Dubai (October 2018), Kuala Lumpur (February 2019), and Vienna (May 2019).

**RRM Figure 1:** High-Level Risks and Suggested Risk Mitigation Strategies

No.	Indicative Risk	Primary Party Affected (Govt/ Private Sector/ Citizens)	Impacts/ consequences on Land Sector PPP	Mitigation Considerations for Land Sector PPPs
	Political and Governance			
1	Weak governance	All	Poor oversight or regulatory measures can threaten safeguards, leading to a loss of citizens'/ users' land rights through corruption or poor oversight.	<ul style="list-style-type: none"> <li>Strengthen public oversight arrangements, such as links to the Government Auditor, Ombudsmen, or similar body.</li> <li>Develop and implement a service charter with clear promises on time, cost and quality for service delivery.</li> <li>Implement effective and responsive public complaint handling mechanisms.</li> <li>Adopt an open and transparent PPP bidding and contracting process to mitigate risk of elite capture.</li> </ul>
2	Strong resistance to change that may be embedded within institutional cultures.	Government	Project delays due to rent-seeking and poor government staff cooperation due to fear of change/ job loss, resistance from professionals with vested interests (lawyers, surveyors), challenges achieving necessary efficiencies and legal reforms.	<ul style="list-style-type: none"> <li>Introduce training or change management for affected government staff.</li> <li>Establish new entities or undergoing corporatization to overcome cultural resistance.</li> <li>Foster relationships and engage with professional associations (lawyers, notaries).</li> </ul>
3	Change in Political support	Private Operator	Typically leads to project delays and/or eventual failure.	<ul style="list-style-type: none"> <li>Undertake concerted stakeholder engagement with the public and government institutions (for example, consultative and informational sessions) to build broad support.</li> <li>Build political will behind the PPP project, propagating the benefits of the project (for example, building consensus in a legislative body for support).</li> </ul>

No.	Indicative Risk	Primary Party Affected (Govt/ Private Sector/ Citizens)	Impacts/ consequences on Land Sector PPP	Mitigation Considerations for Land Sector PPPs
4	Political instability	Private Operator	Typically leads to project delays and eventual failure.	<ul style="list-style-type: none"> <li>Identify and, if appropriate, nominate a project champion to guide project progress and help build support for the project (for example, land agency).</li> <li>Consider political risk insurance through entities like the Multilateral Investment Guarantee Agency (MIGA).</li> </ul>
	Macroeconomic and Fiscal			
5	Fiscal Risk	Government	Direct and contingent liabilities related to the Government's commitment to a PPP can reduce fiscal space but if the risks are carefully managed, fiscal space can be freed.	<ul style="list-style-type: none"> <li>Assess thoroughly and report public sector commitments and liabilities involved in PPP</li> <li>Forecast effects of PPP on Government cash flow using accurate data and realistic assumptions</li> <li>Assess Value for Money (VfM) separately from affordability. It is critical to assess not only if the PPP modality offers more value than traditional procurement (VfM) but also if governments have the resources to cover the fiscal commitments, if applicable, related to the PPP (affordability).</li> </ul>
6	Financial crises impact PPP funding post-award	Private Sector	Insufficient funds to complete the project leading to project delays/failure and contributing to a lack of trust between private and government sector partners.	<ul style="list-style-type: none"> <li>Undertake a risk assessment and include risk mitigation actions for external crises in the structuring of the PPP.</li> <li>Include degree of flexibility in PPP agreement to address such crises.</li> </ul>

No.	Indicative Risk	Primary Party Affected (Govt/ Private Sector/ Citizens)	Impacts/ consequences on Land Sector PPP	Mitigation Considerations for Land Sector PPPs
7	Limited country infrastructure (e.g. connectivity, networking)	Private Sector	Project delayed, unable to operate to specifications, loss of revenue due to low citizen trust/uptake.	<ul style="list-style-type: none"> <li>• If feasible, include development of required infrastructure in the PPP contract as part of the private sector partner's obligations.</li> <li>• Understand Government infrastructure planning and priorities at early-stage conceptualization to identify potentials early in the project lifecycle.</li> </ul>
	Legal and Institutional			
8	Legal framework in place is insufficient and/ or delays or creates barriers to reform	All	Project delays and/ or compromise of proposed solution.	<ul style="list-style-type: none"> <li>• Ensure a clear PPP Act or Law (or equivalent) is in place to facilitate project.</li> <li>• Ensure supportive PPP Regulations, Guidelines, and/ or Policy is in place to facilitate project.</li> <li>• Ensure PPPs in land administration are eligible under the relevant legislation, such as provisions for delegation of authority for private sector operators to provide regulated services on behalf of government.</li> <li>• Ensure that the substantive land laws provide appropriate land governance.</li> <li>• Ensure that laws in the land sector do not constrain the commercial viability of the PPP, but are also balanced with concepts protecting broader public interest.</li> </ul>

No.	Indicative Risk	Primary Party Affected (Govt/ Private Sector/ Citizens)	Impacts/ consequences on Land Sector PPP	Mitigation Considerations for Land Sector PPPs
9	Laws change (or are needed to change) during project implementation	Government, Private Sector	Retroactive amendments to existing PPP or sector-specific legislation can call into question the legal effect of contractual obligations.	<ul style="list-style-type: none"> <li>Any amendment to PPP Act or Law (or equivalent) must identify all pre-existing projects as exempt should the proposed changes materially alter the nature of the contractual relationship under PPP.</li> <li>There must be clear dispute resolution procedures established under the contract to deal with a material breach of contract relating to PPP service delivery, including through substantial regulatory reform.</li> <li>Inclusion of penalty clauses in the contract for violations of responsibilities that do not rise to the level of breach of contract.</li> </ul>
10	Legal inconsistencies or conflicts	Private Sector	Inconsistencies or outright legislative conflicts can introduce regulatory uncertainty that can either cause or exacerbate project disputes.	<ul style="list-style-type: none"> <li>PPP Act/Law (or equivalent) and/or Regulations must clearly identify any legal regimes from which PPP projects are exempt (such as commercial contract law, for example).</li> </ul>
11	No clear definition of roles and responsibilities across sectors and levels of government	All	Project delays and/or failure resulting from limited government agency cooperation/ coordination, poor data standards and data integration, increased project complexity.	<ul style="list-style-type: none"> <li>Review policy/legal framework to clarify institutional roles and responsibilities.</li> <li>Where necessary coordinated activity is required across agencies or down different levels of government negotiate and document clear agreements on roles and responsibilities.</li> </ul>
12	No experience with PPPs in the country	Government, Private Sector	Insufficient project management, legal reforms etc. that lead to poor project oversight and regulation, leading to project delays, poor outcomes or project failure.	<ul style="list-style-type: none"> <li>Retain technical and PPP advisors to support the project and advise ministries.</li> <li>Establish a guiding policy statement to which the private sector may refer when seeking to understand government priorities and strategy.</li> </ul>

No.	Indicative Risk	Primary Party Affected (Govt/ Private Sector/ Citizens)	Impacts/ consequences on Land Sector PPP	Mitigation Considerations for Land Sector PPPs
13	Unsolicited Proposals	Government	Government may lack the process and resources to respond and may accept an unfavourable proposal or potentially pay more than necessary were the PPP tendered competitively.	<ul style="list-style-type: none"> <li>• The eligibility of unsolicited proposals and the requirements for their acceptability must be explicitly defined.</li> <li>• Define clear processes and procedures for unsolicited proposals (USPs) evaluation and negotiation, including specifying if, and when, open competition may be required.</li> <li>• Provisions must be enacted to provide protection for intellectual property (software systems, etc.).</li> <li>• In circumstances where an unsolicited proposal is submitted for competitive tender, and the original proponent is not awarded the final contract, provide some form of compensation for proposal development costs would incentivize the private sector. Otherwise, the "opportunity cost" of unsolicited proposals can be substantial.</li> </ul>
	Financial and Commercial			
14	Revenue from the land registry system is not clear and cannot be forecast	Private Sector	Lack of investor appetite and/or risk that project is ultimately underfunded.	<ul style="list-style-type: none"> <li>• Undertake pre-feasibility/ feasibility study and financial analysis to establish a revenue model for PPP.</li> <li>• Screen PPPs in land administration and only forward projects with a clearly identified revenue source.</li> <li>• Undertake a PPP pilot phase or project.</li> </ul>

No.	Indicative Risk	Primary Party Affected (Govt/ Private Sector/ Citizens)	Impacts/ consequences on Land Sector PPP	Mitigation Considerations for Land Sector PPPs
15	The financial sector has not participated in other PPPs for government services and only for infrastructure	Government	Lack of investor appetite	<ul style="list-style-type: none"> <li>• Develop a strong financial model for PPP.</li> <li>• Undertake market scoping, assessment, and promotional activities for PPP.</li> <li>• Demonstrate revenue potential through targeted and informed projections.</li> <li>• Evaluate the potential for multilateral / bilateral donor agencies to support project financing through viability gap funding or other financial support.</li> </ul>
16	Lack of investor interest	Government	Insufficient tenders are leading to tender cancellation and no reform.	<ul style="list-style-type: none"> <li>• Undertake thorough assessment of PPP business case and financial models during pre-feasibility and feasibility studies to ensure the project has commercial and financial appeal to the private sector.</li> <li>• Undertake market assessments, outreach, and PPP promotion from an early stage to inform the transaction design.</li> </ul>
	Contractual and Technical			
17	Protection of Intellectual Property	Government	Where the private sector develops software to support the land administration system, the issue of intellectual property must be addressed as private businesses will not transfer trade secrets without proper compensation / protection.	<ul style="list-style-type: none"> <li>• PPP contracts need to address commercial, intellectual property rights in Land Administration Systems, such as for source code ownership, and/or royalty free use rights, whether on an exclusive or non-exclusive basis.</li> <li>• Data captured, created, and stored within the system, as well as associated data products, should also be considered intellectual property with clear frameworks established for their ownership, use, and distribution. These frameworks must also align with data privacy provisions.</li> </ul>



No.	Indicative Risk	Primary Party Affected (Govt/ Private Sector/ Citizens)	Impacts/ consequences on Land Sector PPP	Mitigation Considerations for Land Sector PPPs
18	Government access to and control of data compromised.	Government	Government outcomes are less than anticipated; possible public loss of services and/or backlash.	<ul style="list-style-type: none"> <li>• Lay out the ownership of and access to intellectual property and data explicitly in the PPP contract, allowing for the required private sector usage of data for operations while maintaining overarching ownership of data by the government.</li> <li>• Set standards on data collection and meta-data use and/or sale for advertising revenue.</li> <li>• Potentially consider an escrow system for data management where the private sector is insulated from accessing non-essential data.</li> </ul>
19	Data privacy	Citizens	Data exposures or inadequate privacy measures can lead to loss of trust, a compromised project, and possible loss of revenue.	<ul style="list-style-type: none"> <li>• Lay out clear data privacy requirements in the PPP contract with appropriate safeguards, such as regular externally conducted data and information systems audits.</li> <li>• Effective system established by Government to oversee the way that the PPP operator gathers, maintains, and uses data.</li> <li>• Include customer helpdesk requirement in PPP contract.</li> </ul>
20	Subsequent increase in title theft/fraud.	All	Increase in title theft/ fraud causes financial and reputational risks to government (if title guarantee retained) and operators, and lead to low citizen trust/uptake.	<ul style="list-style-type: none"> <li>• Integrate performance standards in private sector obligations in PPP contract to reduce and prevent title theft or fraud (can introduce incentives or penalties in payment schedule to enforce using RBF techniques).</li> <li>• The government provides a legal guarantee for the validity of the rights registered in the land administration system.</li> <li>• Establish title assurance funds to mitigate need for citizens to purchase title insurance.</li> </ul>

No.	Indicative Risk	Primary Party Affected (Govt/ Private Sector/ Citizens)	Impacts/ consequences on Land Sector PPP	Mitigation Considerations for Land Sector PPPs
21	PPP leads to an increase in fees impacting the affordability of services and, subsequently, the accessibility of services for citizens	Citizens	An increase in fees can compromise the project by causing (and resulting from) low citizen uptake.	<ul style="list-style-type: none"> <li>• Establish transparent mechanism for setting and regulating fees, including flexibility to add/ remove products and services over time that should fall under the regulatory framework.</li> <li>• Introduce subsidies or fee caps to ensure pro-poor considerations are kept in mind and protect the population's access to services.</li> <li>• Consider various fee structuring approaches.</li> </ul>
22	Excessive focus on technology/ digitization rather than service delivery and public awareness	Government	Increased social risks and vulnerabilities; project delays or failure due to a lack of behavioural considerations and loss of focus.	<ul style="list-style-type: none"> <li>• Define clear expectations for service delivery standards in PPP contract, including penalties for non-compliance.</li> <li>• Tying payments under PPP contract to performance in service delivery using RBF techniques or incentivizing service delivery through payment structures.</li> </ul>
23	Scope creep (work ends up being more than expected)	Private Sector	The project is delayed, compromised and/or costs more.	<ul style="list-style-type: none"> <li>• Define clear roles and responsibilities of public and private partners in the PPP contract.</li> <li>• Include provisions for re-benchmarking of performance standards and the addition/ removal/revision of performance service level measures.</li> <li>• Include contract language stipulating principles of good faith being adopted by both parties during any negotiations on adjustment to scope.</li> <li>• Require collaborative development of overarching roadmap and annual plan documents laying out scope expectations and deliverables.</li> </ul>

No.	Indicative Risk	Primary Party Affected (Govt/ Private Sector/ Citizens)	Impacts/ consequences on Land Sector PPP	Mitigation Considerations for Land Sector PPPs
24	Project scale seems prohibitive to bids/project success	Government	Lack of investor interest. The project is compromised.	<ul style="list-style-type: none"> <li>• Undertake pre-feasibility and feasibility studies to ensure the project is viable.</li> <li>• Undertake initiate scoping of investor interest at an earlier stage.</li> </ul>
25	The land registration system lacks integrity	Government	Lack of demand for services, little investor interest.	<ul style="list-style-type: none"> <li>• Continue to strength the land administration system (e.g. invest in data quality improvement and system modernization, adopt open data policies while maintaining citizens' data privacy, conduct public awareness campaigns on benefits of system, develop an effective appeals process).</li> <li>• Improve service delivery (better access, streamlined services, public awareness campaigns, etc.).</li> <li>• Include public service KPIs in PPP contract.</li> </ul>
26	Limited demand for services due to lack of public awareness of the value of registration (no culture of registration)	All	Where land registries are not well-established, this could reduce investor appetite and may jeopardize implementation if underestimated.	<ul style="list-style-type: none"> <li>• Introduce a communications and engagement component in the scope of the PPP contract to oblige private sector partner to support the building of a culture of registration.</li> <li>• Make registration easily available and build a culture of registration.</li> </ul>
	Social			
27	Vulnerable groups, including women, indigenous peoples, youth and the disabled, are marginalized and/or adversely impacted by first registration or service provision costs.	Citizens	Project fails to meet tenure security coverage goals.	<ul style="list-style-type: none"> <li>• Use methods like targeted subsidies, RBF techniques and payments, incentives, or penalties to meeting performance levels for providing services to vulnerable groups and addressing pro-poor concerns</li> </ul>

No.	Indicative Risk	Primary Party Affected (Govt/ Private Sector/ Citizens)	Impacts/ consequences on Land Sector PPP	Mitigation Considerations for Land Sector PPPs
28	First registration design negatively impacts those whose rights are not registered through speculation, land grabbing, etc.	Citizens	Project fails to meet tenure security coverage goals.	<ul style="list-style-type: none"> <li>• Introduce RBF payment mechanisms in PPP payment schedule tied to systematic registration and services in underserved or vulnerable communities.</li> <li>• Introduce safeguards through the Government, which the private sector will be obligated to introduce to project design and implementation (e.g. through the contract).</li> </ul>



# GOVERNANCE GUIDANCE MATRIX

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Part IV of PPPs in Land Administration

# GOVERNANCE GUIDANCE MATRIX

This is the Land PPP Governance Guidance Matrix, Part IV in the Knowledge Product on Public-Private Partnerships (PPPs) in Land Administration. The Governance Guidance Matrix (GGM) provides an initial framework through which governments (and development partners, if applicable) can take into account the key considerations and capacity needed on the part of the public sector partner to successfully govern a Land PPP agreement.

When assessing a Land PPP project concept, it is critical to look at the government contracting entity's capacity and ability to govern the PPP project during implementation. This section is directed at procurement authorities responsible for project implementation within the context of managing a PPP. The section outlines the main issues from the perspective of the public entity responsible for monitoring and enforcing the contract and managing stakeholder relationships. These issues are to be understood and addressed within the context of a country's legal and regulatory context.

This Tool includes two key Assessments:

1. Land PPP Governance Baseline Assessment
2. Land PPP Governance Guidance Matrix

These assessments are elaborated upon below.

## 5.1 Land PPP Governance Baseline Assessment

Since Land PPP agreements may award exclusive rights over critical data and/or services to a private operator, frequently under long-term agreements, it is important to ensure the baseline capacity of the regulator/governing body and the PPP Agreement itself. The Land PPP Governance Baseline Assessment below provides guidance on how to assess these aspects of the PPP governance.

**GGM Figure 1:** Land PPP Governance Baseline Assessment

Area Focus	Key Questions
<b>1. Regulatory Capacity</b>	<ul style="list-style-type: none"> <li>• What protections are necessary to assure the continued integrity of the LAS, including continued ownership of all data and related intellectual property?</li> <li>• What conditions are in place for providing access to the Government's LAS IT platform, and any requirements under the disaster recovery plan for data?</li> <li>• What agency is responsible for setting fees and charges for land services and the process for adjustments to the same? What are the governing legislation and regulations tied to establishing transaction fees and property taxation levels?</li> <li>• What agency is directly responsible for contract management and what resources are available directly within the agency (ensuring adequacy of budget and skilled staff), or able to be accessed externally from other government bodies such as PPP oversight units within Ministries of Finance?</li> </ul>
<b>2. PPP Agreement</b>	<p>Does the PPP Agreement:</p> <ul style="list-style-type: none"> <li>• Establish monitoring and reporting requirements to ensure contract compliance and enforce delivery of performance standards, data security and privacy protections?</li> <li>• Identify Government recourse in the case of non-compliance, including potential penalties for breaches?</li> <li>• Identify conditions and procedures for addressing changes, disputes, and termination?</li> </ul>

## 5.2 Land PPP Governance Guidance Matrix

Upon assessing the key areas outlined in the Land PPP Governance Baseline Assessment, the Land PPP Governance Guidance Matrix (below) provides details on the main actions, preparatory steps, and issues for consideration during the different stages of monitoring and enforcing the contract and managing stakeholder relationships.

**GGM Figure 2:** Land PPP Governance Guidance Matrix

Stage	Main Considerations	Specific Activities
<b>1. Planning for Contract Management</b>	A. Guidance Manual	Develop a guidance manual for Contracting Agency staff that sets out the following: <ul style="list-style-type: none"> <li>• Oversight and management responsibilities of the unit against the requirements in the Land PPP Agreement.</li> <li>• Practical steps needed according to each clause of the Agreement.</li> </ul>
	B. Systems for Communications, Government Accounting of the PPP Agreement, and Treatment of Public Employees	<ul style="list-style-type: none"> <li>• Communication Strategy and Protocols               <ul style="list-style-type: none"> <li>◦ Develop a communications strategy and agree upon communication protocols that facilitate: (i) information exchange between the public and private parties; as well as, (ii) communication with other Government agencies, local jurisdictions, and end-consumers.</li> <li>◦ Train staff about requirements under laws pertaining to Freedom of Information, and Protection of Citizens Rights to Privacy and Confidentiality. To promote transparency, some countries require that certain contract information be made publicly available.</li> <li>◦ Establish reporting mechanisms (format and frequency) for work progress, operations, management, and financials.</li> </ul> </li> <li>• Government Accounting of the Land PPP Agreement               <ul style="list-style-type: none"> <li>◦ Ensure that the responsible public authority understands the structure of the partnership and records it in accordance with the accepted accounting method.</li> </ul> </li> <li>• Treatment of Public Employees               <ul style="list-style-type: none"> <li>◦ If transitioning the LAS to commercially manage operations proposes transferring (either to the private entity or another function within the Government) and/or laying-off public employees, the process must work through employee concerns regarding maintenance of seniority, wages and pensions, benefits and collective agreements. For example, under the Agreement for commercialization of land services in South Australia, many employees of the land titles services were either involved in the transition or placed in positions in government retained functions.<sup>1</sup></li> </ul> </li> </ul>

<sup>1</sup>Source: South Australia Treasurer Media Release, August 10, 2017. Available at: <http://www.hawkerbritton.com/wordpress/wp-content/uploads/2017/08/Agreement-for-Land-Services-SA-to-provide-transactional-land-services.pdf>



Stage	Main Considerations	Specific Activities
<b>2. Contract Management (Monitoring Contract Compliance and Enforcing Performance Standards)</b>	A. Agreed Contract Specifications and related Contract Management & Operations Manual	<p>Confirm the infrastructure and services are as per the agreed contract specifications. Contract management include two phases:</p> <ul style="list-style-type: none"> <li>• <b>Phase 1: Build/Upgrade Systems (IT and/or Operating Platforms) and Transition Data:</b> <ul style="list-style-type: none"> <li>◦ Ensure work progress, approve any changes and adjustments as per the process laid-out in the Agreement, and contain any time and cost overruns.</li> </ul> </li> <li>• <b>Phase 2: Operations</b> <ul style="list-style-type: none"> <li>◦ Ensure upgrades and maintenance of the systems and services.</li> <li>◦ Ensure scheduled reporting to facilitate monitoring, identify trends, respond to issues.</li> <li>◦ Monitor performance to ensure that Government targets, benchmarks, and Key Performance Indicators (KPIs) are met.</li> <li>◦ Ensure end-consumer protection, including mechanisms for grievance redressal; and, actions in the event of data breach and related liabilities.</li> </ul> </li> </ul>
	B. Contract Management Unit Processes for Enforcement of Commercial Terms and Plans for Mitigation of Key Risks	<p>The contract management unit would implement processes as per the Agreement to address enforcement of commercial terms and plan for mitigation of critical risks, including:</p> <ul style="list-style-type: none"> <li>• Whether in addition to the LAS function, the private party may provide additional value-added services to the end-consumer, the necessary government approvals for the same, their impact on other commercial interests and/or government services, and how these would be priced and supervised.</li> <li>• Whether services may be delivered from, or data stored in, other locations (and therefore be subject to any laws and regulations of those jurisdictions).</li> <li>• Collaboration and coordination with other public agencies:             <ul style="list-style-type: none"> <li>◦ Ensure that other public agencies' access to information is not compromised.</li> <li>◦ Ensure seamless interface across complimentary functions (titles, valuation, land boundaries).</li> </ul> </li> <li>• Dealing with changes (in accordance with mechanisms agreed in the PPP Agreement), including:             <ul style="list-style-type: none"> <li>◦ Planned reviews and adjustments.</li> <li>◦ Renegotiations or contract variations.</li> <li>◦ Conflict resolution.</li> <li>◦ Early termination, as per the provisions in the PPP Agreement.</li> </ul> </li> </ul>

Stage	Main Considerations	Specific Activities
<b>3. Contract Expiry and Asset Handover</b>	A. Contract Expiry Arrangements	<ul style="list-style-type: none"> <li>• Upon contract expiry (or in the event of early termination) the contract management unit would manage the transition of LAS systems and services back to the government, including dissolving the partnership and ensuring that the specified requirements for asset transfer (handback of hardware, software, data, Intellectual Property, licenses, warranties, system manuals, training) or disposal are met while maintaining data integrity and security.</li> <li>• Handback plans will include training and capacity development of government staff and ensure uninterrupted delivery of service.</li> </ul> <p>Note: Key related risks in long-term Land PPP Agreements are technology obsolescence and/or changes in user expectations.</p>