Forging Ahead

Restoring Stability & Boosting Prosperity

PUBLIC FINANCE REVIEW

5. Public-Private Partnerships

Lao PDR 2023

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5. Public-Private Partnerships

While the Lao PDR has been successful in mobilizing significant private sector finance through PPPs, projects have likely provided limited value for money and have increased fiscal costs and risks. No other country in the world has relied more heavily on public-private partnerships (PPPs) than the Lao PDR. PPPs have been the preferred mechanism to exploit the country's large hydropower resources for several decades. More recently, limited fiscal space has increasingly led to the use of PPPs in other sectors, such as transport. PPPs can provide access to private sector finance to implement public projects, but PPPs are not 'free' as they need to be ultimately paid for by the public sector or end users. The government has participated directly and indirectly in PPPs (e.g., through state-owned enterprises) and is thus exposed to their performance. PPPs can also improve the delivery of public assets and services (when compared to traditional public procurement), but these potential benefits can only be achieved if projects are carefully prepared, tendered, and managed. In some cases, fiscal support might be needed to ensure project viability, which may include direct commitments (e.g., availability payments and viability gap funding), contingent support (e.g., payment guarantees), and tax incentives. In the Lao PDR, weak governance structures and limited capacity to assess, prepare, and negotiate PPPs have likely resulted in suboptimal value for money. PPPs have led to an increase in fiscal commitments, contingent liabilities, and foregone revenues. It is critical that PPP-related fiscal costs and risks are carefully identified, assessed, and managed throughout the project lifecycle. The success of PPPs partly hinges on the establishment of a strong institutional, legal, and regulatory framework. If not adequately prepared, procured, and managed, PPPs may impose an additional burden on the budget and thus undermine fiscal sustainability.

Main recommendations: (i) upgrade the Decree on Public-Private Partnerships to a law and develop related guidelines to strengthen the legal and regulatory framework; (ii) enhance the capacity to prepare, procure, and manage PPP projects and improve interagency coordination; (iii) establish clear institutional structures, responsibilities, and processes for assessing, approving, and managing PPP-related fiscal costs and risks; (iv) mandate transparent and competitive procurement to maximize value for money; and (v) establish a revolving project development fund to support project preparation and structuring.

Chapter structure: The chapter starts by providing a brief introduction to PPPs, covering definitions, key features, potential benefits and limitations, and risks. It then offers insights on the Lao PDR's experience with PPPs, including an overview of the current institutional, legal, and regulatory framework. The chapter presents two PPP project case studies to highlight some of the strengths and weaknesses of the current framework with a view to improving the governance of PPPs. It then concludes with recommendations to ensure that future PPP projects deliver strong benefits to the public without exacerbating the fiscal and debt burdens.

5.1 Background

Infrastructure development is important to supporting economic growth, but there is currently limited fiscal space to undertake significant investments. More and better infrastructure can promote inclusive and sustainable development, particularly if it generates high economic and social returns while safeguarding the environment. The Lao PDR has made large investments in infrastructure over the past two decades.[183] The Ninth National Socio-Economic Development Plan (2021–2025) acknowledges the need to build resilient infrastructure to improve connectivity with a view to facilitating trade and investment (i.e., transforming the country from land-locked to land-linked).[184] The country also aims to become the 'battery of Southeast Asia' through large investments in hydropower. However, there is currently very limited fiscal space to invest in new infrastructure assets owing to poor revenue mobilization and high spending needs (e.g., debt servicing). This places a strong emphasis on the need to improve the efficiency and effectiveness of public investment. In this context, the government may, whenever possible and desirable, leverage limited public resources for infrastructure development through public-

[183] This includes both public investment projects and public-private partnerships (PPPs) projects. Many PPPs have been implemented since the early 1990s, mostly build-operate-transfer (BOT) projects in the energy sector.

[184] See the World Bank's Country Economic Memorandum entitled "Linking Laos, Unlocking Policies".

private partnerships (PPPs). However, demand for PPPs should be mainly driven by a desire to enhance spending efficiency rather than an attempt to override fiscal constraints. PPPs are not 'free' and mainly enable the public sector to spread capital spending over a long period or place the funding onus on end users. In fact, PPPs can turn out to be more costly than traditional procurement methods over the lifecycle of the asset. Therefore, PPPs should be regarded as a procurement option, within the broader public investment management system, rather than a financing mechanism.

5.2 Key elements of PPPs

5.2.1 Definitions

A PPP is a long-term agreement between the public and private sectors to deliver an asset or service typically provided by the public sector. There are different types of private sector engagement in public infrastructure development. Although there is no universal definition, there are some common elements that characterize PPP projects. The term PPP usually refers to a long-term collaborative arrangement (defined and mediated by a legally binding contract) between a public sector entity (e.g., government agency or public corporation) and a private sector entity (e.g., company or consortium) whereby the parties share the responsibility and risk of delivering a public asset or service (e.g., hydropower dam, or electricity supply). The private sector typically provides financing and expertise (to design, construct, and operate the project), while the public sector usually retains asset ownership and some level of oversight and control.[185] The long duration of PPP contracts creates an incentive for the private sector party to integrate service delivery costs into the design of the project, potentially optimizing the trade-off between initial investment and future costs (e.g., construction and operation & maintenance costs) through a 'whole-life' approach. The private sector recoups and remunerates their investment through regular government payments or user fees. Hence, PPPs are a mechanism to procure public infrastructure assets and services using private sector resources, which can deliver infrastructure more efficiently and attract additional finance to reduce infrastructure gaps.[186]

Definitions vary across countries and are often anchored in domestic legislation. Definitions matter because they determine which investment projects should follow the PPP regulatory framework. The 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".* Specific definitions can usually be found in national PPP decrees or laws, often reflecting the legally authorized contractual arrangements between the public and private sectors for delivering infrastructure assets and services in that country. The definition of a PPP in the Lao PDR is contained in Article 2 of the PPP decree, which states that a PPP is: *"A partnership between public and private parties, written in English as Public-Private Partnership (PPP), can be a joint investment between public and private entities or a partnership where the investment capital is borne entirely by a private party into a public project such as a newly established project, a project to improve existing infrastructure or a project to provide public services, including to develop tourism, agriculture, energy, mining and others under a joint-venture agreement within a certain period of business operation time in compliance with the rules of law."* It should be noted that this definition does not mention risk transfer, nor the importance of linking remuneration to performance. Adopting a clear definition of PPP in line with international good practices is the basis for ensuring all relevant investment projects follow the appropriate regulatory framework.

PPPs differ from traditional public procurement as the private sector assumes responsibility for delivering several project functions on a long-term basis. In conventional public procurement, the public sector usually takes responsibility for nearly all project functions, and financing is typically provided by the public sector.[187] Typically, public procurement involves a single transaction where the government purchases goods or services through a tender process. Hence, the provision of a public asset or service may involve several separate contractual arrangements.

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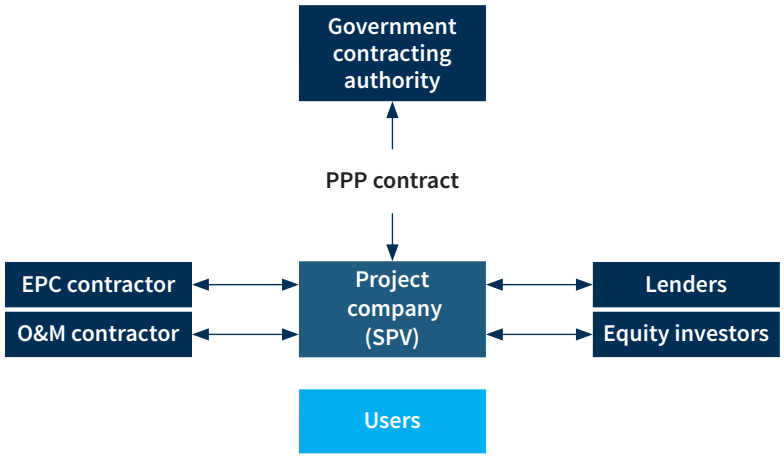
[185] The economic rights to exploit an asset might be more relevant than asset ownership.

[186] Sectors that typically receive PPP investments include transport (e.g., roads, railways, ports, and airports), energy (e.g., electricity generation, transmission, and distribution), water and waste (e.g., water treatment and distribution, and solid waste management), and information and communications technology (e.g., land and submarine cables). There have also been PPP investments in social infrastructure (e.g., schools, hospitals, and social housing).

[187] Main project functions include: (i) design, (ii) build, (iii) finance, (iv) operate, and (v) maintain. The build function may entail the construction of a new asset, or the rehabilitation or extension of an existing asset.

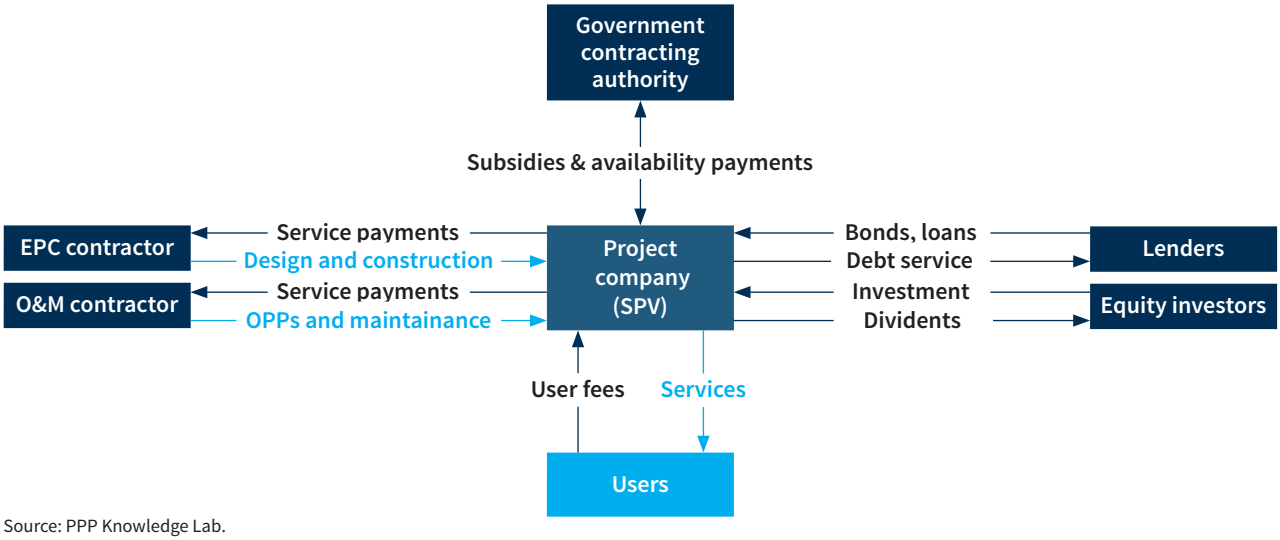
However, an important characteristic of PPPs is that they combine several functions into a single large contract, known as bundling.[188] The private sector entity usually establishes a special-purpose vehicle (SPV) to manage the project and assumes responsibility for delivering several project functions on a long-term basis (Figure 5.1).[189] While public procurement may also entail some level of bundling, there is limited transfer of responsibility and risks to the private sector. Under a PPP, the private party is accountable for project performance and bears significant risk and management responsibility, even if the project functions transferred to the private sector vary from contract to contract. Poor performance under the contract could lead to contract cancellation. While the upfront financing is (mostly) provided by the private sector, the public sector or end users will ultimately pay for the project as the private sector will seek returns on their investment (Figure 5.2).

Figure 5.1: Typical PPP project structure



Source: PPP Knowledge Lab.

Figure 5.2: Flow of funds in a PPP arrangement



Source: PPP Knowledge Lab.

PPPs entail greater involvement and responsibility of the private sector, but they do not encompass privatization. PPPs can be placed within a spectrum that ranges from traditional public procurement to privatization, with the transfer of increasing responsibilities and risks to the private sector (Table 5.1). In public procurement, project financing is provided directly through the government budget and project risks are mostly

[188] PPP contracts delineate the functions allocated to the private sector, which will vary according to the type of asset and service involved, as well as public sector preferences for private sector involvement (in terms of responsibility and risk).

[189] The SPV enables the segregation of all assets and liabilities linked to the private provision of services.

borne by the public sector, except design and construction risks (e.g., cost overruns).[190] The construction price quote is often the most important criterion in evaluating bids, and the procurement process places limited emphasis on the operational phase. In a PPP, financing is provided by the private sector, with project costs (including financing, construction, and operations & maintenance) expected to be recovered through availability payments or user fees.[191] The contracting authority provides broad (output) specifications, leaving the private sector to provide the best solution to meet them. PPPs entail a longer-term form of private engagement, with risks shared among the parties. Several criteria can be considered in the bid evaluation process, including price, risk allocation, technical and financial capacity, proposed financial arrangements, ability to address environmental and social issues, and reliability of the planned technical solutions. Privatization is not regarded as a PPP since it typically involves the permanent transfer of a public asset or the responsibility for delivering a service to the private sector.[192] In this case, the public sector may continue to regulate the asset in terms of service quality and tariffs, but almost all risks are borne by the private sector.

Table 5.1: Differences between public procurement, PPPs, and privatization

	Public procurement	PPP	Privatization
Financing	Public	Private	Private
Impact on government budget	Immediate and negative (due to upfront costs)	Moderate and negative (depending on payment mechanism; often spread over the duration of the agreement)	Positive (due to privatiszation proceeds and elimination of future liabilities)
Risks	Borne mostly by the public sector (except design and construction risks)	Shared between parties (depending on negotiation)	Borne fully by the private sector
Public sector involvement in the project	Extensive (most stages of the project cycle)	Moderate (e.g., output specifications, procurement and monitoring)	Limited (mainly as a regulator)
Relation with private sector	Short term	Long term (duration of the agreement)	Long term (mainly as a regulator)
Suitability	Projects with high socio-economic returns but limited commercial viability	Projects with high socio-economic returns and commercial viability	Projects with proven long-term commercial viability

Source: World Bank staff.

5.2.2 Types of PPPs and project lifecycle

There are several types of PPP contracts, but there is no international standard nomenclature. The terminology used to describe PPP contracts varies across countries, with no consistent standard for naming and defining them (Figure 5.3). Some nomenclatures focus on the project functions allocated to the private party, while others focus on the legal ownership and control of assets. An example of the latter is the build-operate-transfer (BOT) contract, which entails the creation of a new public asset and involves the transfer of responsibility for several functions (e.g., design, build, and operate) to the private sector over a long period. In many cases, the private sector provides the financing for the project and owns the underlying project assets until they are transferred to the public sector at the end of the contract. There are several contractual types related to BOT, such as build-transfer-operate (BTO),

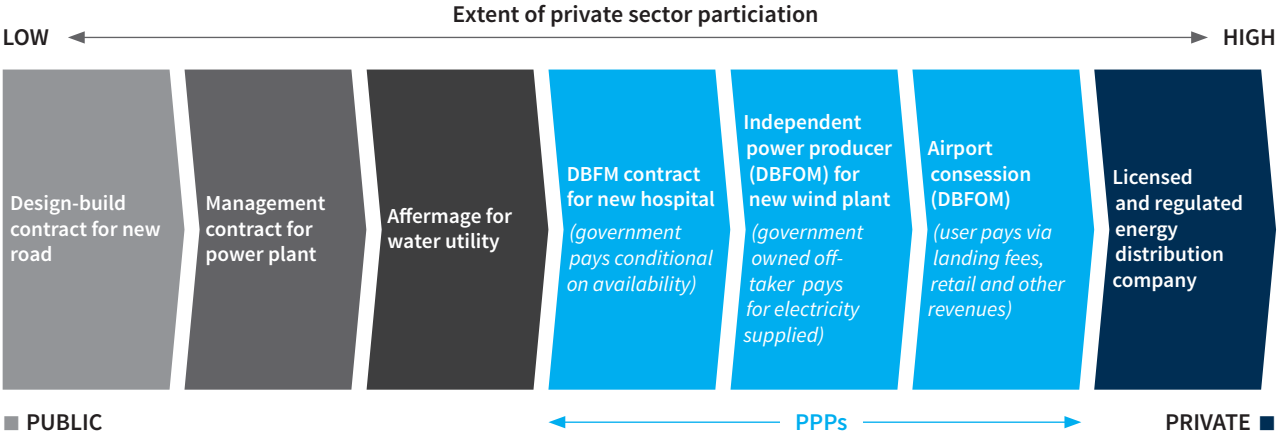
[190] Under a build contract, the contracting authority provides detailed design (input) specifications, while under a design and build contract the private sector is responsible for both the design and construction of the project. In both cases, the private sector is liable for construction-related risks (e.g., cost and time overruns, and commissioning risks), but the public sector typically bears all other risks. Moreover, if a cost overrun is caused by a variation order from the contracting authority, then the cost is borne by the public sector.

[191] PPP contracts define the payment mechanism through which the private sector is paid for providing the public asset or service, which should be linked to performance. This can come through user fees (e.g., road tolls and energy tariffs), availability payments (where the government makes a regular payment), or a hybrid approach (i.e., a combination of user fees and availability payments).

[192] Under a PPP, public assets typically remain under the ownership of the government or, if they are temporarily owned by the private partner, transferred back to the public sector when the term of the contract expires.

whereby asset ownership is transferred once construction and commissioning is complete. BOTs and BTOs are also generally referred to as design-build-finance-operate-maintain (DBFOM) contracts. These contract types are typically the most complex, especially in terms of oversight of the award, implementation, and operation. In all these cases, the private party is accountable for project performance and bears significant risk and management responsibilities. In return for bearing these responsibilities and risks, the private investor is often paid a regular service fee by the government or collects fees from end users for the duration of the contract. Most PPPs undertaken in the Lao PDR have been classified as BOT projects, predominantly in the electricity generation and road sub-sectors (see Annex, Table 5.4). State-owned enterprises in the energy sector have been involved in PPPs, which often involve power purchase agreements with take-or-pay clauses (i.e., a commitment to buy a pre-agreed amount of electricity or pay a fine).

Figure 5.3: Types of PPP contract (examples)



Source: PPP Knowledge Lab.

Note: DBFM stands for design-build-finance-maintain, DMFOM stands for design-build-finance-operate-maintain.

The lifecycle of a PPP project depends on who initiates the process and the procurement method. The public sector can proactively identify, prepare, and procure PPP projects through a solicited process, or the private sector can identify a project and propose it through an unsolicited process. Irrespective of whether a project originates from a solicited or unsolicited proposal, the assessment process should be the same. The lifecycle of a PPP project is generally considered as having four main phases (Table 5.2): (i) identification; (ii) preparation; (iii) procurement; and (iv) implementation. Solicited projects typically arise from a robust project identification process (ensuring they are aligned with national and sector priorities) and are prepared as part of a competitive procurement process. In unsolicited projects, the public sector might be at a disadvantage in assessing and negotiating the project due to information asymmetry.[193] In the Lao PDR, most PPP projects have emerged from unsolicited proposals and awarded through direct negotiation. In the absence of robust frameworks and processes to ensure unsolicited projects are carefully assessed and competitively procured, these may result in limited value for money and increased fiscal risks. Therefore, solicited and unsolicited projects should follow the same review and approval process and be tendered transparently and competitively.

Project identification (phase 1). The primary objective of this phase is to determine public investment needs and priorities, and to identify projects that are (i) aligned with existing national and sectoral plans, (ii) able to generate significant economic and social benefits, and (iii) affordable. This process should apply to all public investments and thus be part of the broader public investment management system. Once projects are prioritized and selected, and typically integrated into a public investment plan (PIP), their potential to be procured as a PPP can be assessed. This requires the careful screening of projects to determine their suitability to be procured as a PPP.[194] By identifying potential PPP projects upfront, the public sector can ensure that it allocates scarce resources to those projects that have strong potential to be procured as PPPs. Most screening tools examine a

[193] Unsolicited projects are often awarded through direct negotiation. Even if they are tendered, the project proponent may be provided with some bidding advantage, which undermines competitiveness and transparency.

[194] There are several tools available to help governments screen PPP projects, including the PPP Project Screening and Analytics Tool (PSAT) developed by the World Bank.

project's suitability to be structured as a PPP by assessing the economic and social benefits, strategic importance, legal and investment environment, market interest, fiscal exposure, potential for private sector innovation, and the project's ability to generate value for money.

Table 5.2: Lifecycle of a PPP project

Lifecycle	Solicited proposal (competitive tender)	Unsolicited proposal (competitive tender)	Unsolicited proposal (direct negotiation)
Identification	• Identify projects (NSEDP-PIP) Select priority projects Screen as PPP *	• *Receive proposal from private sector*	• *Receive proposal from private sector*
Preparation	• Structure (identify and allocate risks) • Appraise (feasibility, viability, VfM, fiscal)	• Structure (identify and allocate risks) • Appraise (feasibility, viability, VfM, fiscal) • Decide on proposal **	• Structure (identify and allocate risks) • Appraise (feasibility, viability, VfM, fiscal) • Decide on proposal **
Procurement	• Request for proposals • *Receive proposals from private sector* • Review and select proposal • Award contract	• Request for proposals • *Receive proposals from private sector* • Review and select proposal • Award contract	• Direct negotiation • Award contract
Implementation	• Manage contract (monitor delivery and risk)	• Manage contract (monitor delivery and risk)	• Manage contract (monitor delivery and risk)

Source: World Bank staff.

Note: Structuring and appraising might be weak or nonexistent for some unsolicited proposals (gray).
* If not suitable for public–private partnership, it can follow traditional procurement. ** If rejected, project does not proceed.

Project preparation (phase 2). During this phase, the implementing agency needs to define and structure the project it wants to implement as a PPP. This will include a description of the physical facilities to be constructed, the technology to be used, the outputs to be provided, and the end users. Once a project has been clearly defined, design parameters and outputs to be provided should be clearly specified. The project should then be assessed for feasibility across similar dimensions used to initially screen the project for PPP suitability. However, at the project preparation stage, it is important that these assessments are now undertaken based on detailed feasibility studies (e.g., technical, legal, economic, social, and environmental) and financial analyses. At this stage, the PPP structure can be clarified through discussions with potential private sector bidders and can be adjusted in response to such discussions. The main objectives of this stage are to ensure the project is economically viable, bankable (i.e., able to raise finance), affordable, and generates value for money.

Project procurement (phase 3). The implementing agency prepares for the tendering of the project, including preparing expressions of interest, requests for qualification, and requests for proposal. The requests for proposal should include an initial draft of the PPP contract and other project agreements, in line with national laws, that set out the obligations and requirements that private sector investors are expected to meet. Bids are submitted and evaluated based on transparent criteria, and the successful bidder is awarded the project. It is important that the procurement process is structured in a transparent manner that encourages competition, as the competitive tension between bidders will help maximize value for money (e.g., ensure that expected costs are not inflated and profits underestimated). Most governments use a competitive selection process to procure PPP contracts as the best way to achieve transparency and value for money.

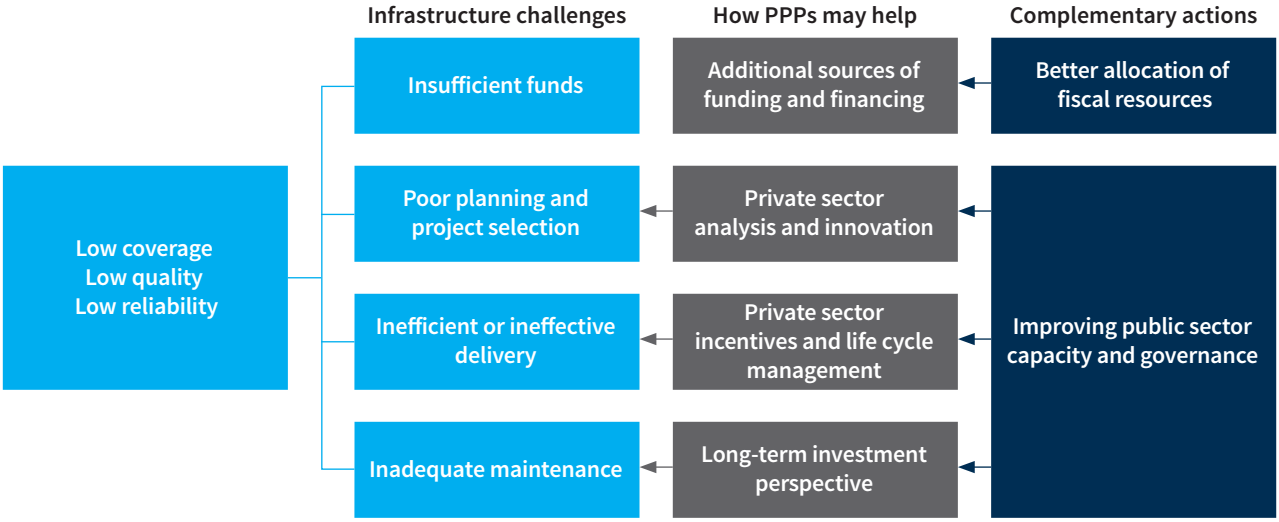
Project implementation (phase 4). During this phase, the project company (established by the successful bidder) implements the project, which typically includes final design, construction, operation, and maintenance. During the implementation phase, the implementing agency should establish a project management unit to ensure that the project company implements the project in accordance with the project agreement and national requirements (e.g., social and environmental legislation). In the case of non-compliance, the project management unit should apply the contractual remedies (including payment penalties) set out in the agreements. At the end of the contract, the underlying asset is often returned to the public sector and, as such, it is important that the project agreement sets out the conditions for hand back to ensure that the asset is still 'fit for purpose'.

5.2.3 Potential benefits, limitations, and risks

Potential benefits

PPPs can generate several benefits, but these are not automatic and depend on the fulfillment of certain conditions. Procuring public assets and services through PPPs can potentially yield considerable benefits when compared with traditional procurement. For instance, PPPs can help mobilize private capital for public infrastructure investment, leverage private sector expertise, and create strong commercial management incentives. PPPs can help close infrastructure gaps and enhance the delivery of public assets and services (Figure 5.4).[195]

Figure 5.4: How PPPs can help address infrastructure challenges



Source: PPP Knowledge Lab.

PPPs can provide access to private sector finance to implement public projects that otherwise would not be possible due to insufficient funds. Fiscal and borrowing constraints can limit the government's ability to undertake additional infrastructure projects through traditional public procurement. PPPs can provide additional financing to help close infrastructure gaps and improve service delivery. This alternative source of finance may include private sector investors, commercial banks, development banks, multilateral organizations, and institutional investors (e.g., pension funds and insurance companies). However, it should be noted that PPP projects will ultimately be paid for by the public sector (e.g., government or state-owned enterprise) or end users through user fees. In that sense, PPPs are not 'free' and mainly enable the public sector to spread capital spending over a long period (or place the funding onus on users) by attracting private financing for public infrastructure projects. Therefore, the availability of private financing to invest in public projects should not be the main reason for implementing a PPP.[196]

PPPs can improve project design and appraisal by harnessing private sector skills and resources, which may strengthen project selection. Poor project preparation and selection can result in under-used assets and poor service delivery at a high cost. This is often due to poor planning and coordination, inadequate analyses (e.g., cost-benefit analysis), or political economy issues (e.g., politics or vested interests). PPPs can help improve project selection by harnessing the due diligence of private sector investors, especially since their profits depend on accurate appraisals (e.g., cost and revenue forecasts).[197] PPPs can also enable better access to private sector

[195] The private sector may benefit from collaborating with the public sector by generating profit opportunities (through availability payments or user fees) and accessing long-term investment opportunities (as government contracts can generate business, provide certainty and security, and improve the company's image).

[196] The decision should involve a careful assessment (e.g., cost-benefit and value-for-money analyses). This is because PPPs may generate fiscal costs (including foregone revenues) and risks not well understood at the time of the agreement.

[197] A public sector entity might have an incentive to overestimate demand. Subjecting proposed projects to private sector scrutiny can enhance project selection (e.g., help identify projects not economically viable). PPPs can create an incentive mechanism to align public interests (e.g., adequate public service delivery) and private interests (i.e., profit). However, conflicts may arise if incentives are not carefully designed, with profit maximization potentially leading to reduced service quality or higher user fees (e.g., the private sector may have an incentive to inflate costs).

expertise (specialized knowledge), experience, technology, and skills, which can benefit the project. However, these gains can only materialize if the preparation and selection process is effective and competitive.

PPPs can lead to a more efficient and effective delivery of public assets and services. The delivery of assets and services by the public sector might be constrained by limited capacity and weak management incentives. Compared to traditional public procurement, PPPs can improve the construction of assets and enhance service delivery through the output-based approach of PPPs. This provides an incentive for the private sector to take a long-term (whole-life) approach to the design, construction, and maintenance of the project, which can entail considerable cost savings and efficiency gains.[198] A successful PPP will identify and combine the strengths of all parties, both in terms of technical and managerial skills, as well as financial resources. However, potential gains depend on preparing, procuring, and implementing the PPP properly.

PPPs can improve the maintenance of public assets, which helps protect their value and lifespan. Public sector infrastructure assets are often inadequately maintained due to poor planning, procurement constraints, or limited budgets allocated for maintenance, as political economy tends to bias public spending toward new assets over maintenance. Inadequate maintenance increases lifetime costs, shortens the lifespan of the asset, and decreases benefits. Infrastructure asset deterioration usually entails high rehabilitation costs, while poor quality infrastructure is also costly to operate and maintain and may adversely impact the safety of users. Regular preventive maintenance is cost-effective since it preserves assets at serviceable standards at a reduced lifecycle cost. PPPs create incentives to prioritize asset maintenance, since they often bundle construction (or rehabilitation) and maintenance into a single contract. This creates an incentive for the private party to build the asset to a high quality standard upfront and establish an efficient maintenance regime, reducing the need for maintenance in the future and, thus, reduce the whole-life cost of the asset. If project revenue is contingent on service performance (e.g., to attract users who pay fees or meet quality requirements for availability payments), then the private entity has a strong incentive to carry out adequate maintenance.

Potential limitations and risks

While PPPs can generate benefits, they have several limitations that need to be carefully considered. Procuring public assets and services through the PPP modality has some disadvantages when compared to traditional procurement. Potential limitations include higher costs (as they can be more expensive than traditional procurement), lack of transparency (if there are non-disclosure requirements), complexity (e.g., in the design and negotiation), inflexibility (given their long-term nature), limited accountability (due to fragmented roles and responsibilities), misallocation of risks, conflict of interest, and political economy (e.g., vested interests). Some of these may lead to excess returns for the private sector at the cost of the public sector or end users.[199]

PPPs can create significant fiscal costs and risks, while undermining fiscal and debt transparency. PPPs often require government support to ensure their financial viability.[200] This support can be in the form of direct fiscal commitments (e.g., availability payments and viability gap financing), foregone revenues (e.g., tax exemptions), and contingent liabilities (e.g., minimum revenue guarantees, payment guarantees, and termination payments).[201] Foregone revenues and contingent liabilities can be sizable but difficult to assess and monitor. If contingent liabilities do materialize, they can significantly exacerbate fiscal and public debt burdens. Moreover, PPPs are also often associated with a lack of transparency, since they may be subject to limited information disclosure, and difficult to understand due to their complexity. PPPs can, therefore, bypass public financial management controls, such as prudent fiscal rules (e.g., budget deficit and public borrowing ceilings). This may occur when policy makers are under pressure to deliver infrastructure and decide to exploit the limitations of cash basis budgeting and narrow definitions of public sector debt. Future payment commitments, foregone revenues, and fiscal risks are unlikely to be adequately captured in budget documentation. It is therefore important to closely monitor PPP-

[198] For instance, the infrastructure can be designed to reduce operation and maintenance costs over the life of the project, especially if revenue is linked to performance.

[199] Moreover, limited ability to assess and negotiate PPP projects may lead to mispricing, whereby the private sector earns excess returns due to long concession terms, high user fees (e.g., tariffs and tolls), generous government support (e.g., tax and royalty exemptions), and inadequate risk allocation. This is a particular concern for PPPs not tendered competitively.

[200] It is important to assess if the economic and social benefits generated by the project outweigh the costs of the project, including any support provided by the government.

[201] PPP availability payments are not very different from the repayment schedule of traditional public procurement financed by debt. If PPPs are treated as being off-balance sheet, and fiscal costs and risks are not adequately captured elsewhere, then PPPs may not be consistent with prudent public financial management.

related costs and risks (e.g., through a centralized database) and gradually include their assets and liabilities in the government balance sheet (like the assets and liabilities of state-owned enterprises).

PPPs cannot improve planning and may even distort investment priorities. PPPs cannot eliminate poor planning and project selection, since the public sector remains responsible for strategic planning (including coordination across sectors) and selecting projects and the procurement method. In fact, PPPs may even distort investment priorities, with low-priority projects selected on the basis that they can be implemented through PPPs. Projects initiated by the private sector (i.e., unsolicited proposals) may not be aligned with national development strategies and investment priorities, and they may further exacerbate weaknesses in planning and coordination. The long-term commitment of PPP contracts creates a degree of inflexibility that may lead to planning challenges that might be costly to overcome.[202] PPPs can also provide an opportunity for corruption, which leads to inefficiencies and may bias project selection.[203]

PPP projects are time-consuming and costly to prepare, and not all projects are suitable to be procured as a PPP. PPPs are significantly more complex and incur higher transaction costs than traditional procurement methods (e.g., legal, financial, and technical advisory costs). They are more demanding, in terms of both time and skills. Considerable financial and human resources need to be allocated at the outset, with the risk that some projects may eventually prove to be unsuitable for procurement as a PPP.[204] Many of the potential benefits hinge on the ability of the implementing agency to adequately prepare, procure, and manage the PPP project over its lifetime, which can be a challenge when public sector capacity is low. However, not all projects are suitable to be procured as PPPs (e.g., because of public reluctance, excessive complexity, inability to transfer risks, and lack of affordability from the government or end users' perspective).[205] Therefore, it is essential that governments adequately identify and screen projects to assess their suitability for a PPP before committing significant resources to their preparation and implementation.

Value for money and risk allocation

PPP projects need to demonstrate higher value for money when compared to traditional public procurement. Value for money means achieving the optimal combination of benefits and costs in delivering the services that users want. Value for money is usually determined by using both qualitative and quantitative approaches.[206] To assess whether a project is suitable for implementation as a PPP, it needs to demonstrate that it can achieve higher value for money for the public over the life of the project when compared to other procurement structures, especially traditional public procurement. A project is generally regarded as being suitable for a PPP if the net present value (NPV) of the overall risk-adjusted costs of the project is lower than the NPV of the overall risk-adjusted costs to the public sector of implementing the same project using a traditional procurement approach. Hence, the government needs to undertake a comparison between the estimated whole-life costs of the project under a PPP method and traditional procurement (known as the 'public sector comparator'). The results of this analysis will then allow the government to assess and support the rationale for implementing a project under a PPP in terms of value for money for the public sector and end users.

One of the main drivers of value for money is the appropriate and fair allocation of risks to the party that is best able to manage them. PPP value drivers are the mechanisms that can be used to improve value for money, of which risk transfer is a key one.[207] Risks associated with PPPs vary across countries, sectors, and projects. However, there are several risks commonly associated with infrastructure PPPs, such as design, construction, revenue, demand, operational, economic (e.g., interest rate, exchange rate, and inflation), political, environmental, social, legal, and regulatory. The basis on which these risks are allocated between the public and private sector will be driven by

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[202] It is difficult to adapt to changing circumstances, especially when they are difficult to anticipate (e.g., fall in user demand).

[203] PPPs are vulnerable to 'agency' problems, since the public sector makes decisions on behalf of citizens, taxpayers, and end users. This issue is compounded by the large amounts typically involved, which can lead to corruption and even the failure of PPP projects. Hence, there is a need for evidence-based public decision making, as well as greater transparency and accountability.

[204] Efficiency gains should outweigh these additional (preparation) costs.

[205] Moreover, user fees may face social and political resistance in sensitive sectors (e.g., education and health), while there are often environmental concerns.

[206] Qualitative factors include the extent to which the procurement can generate competition and the ability of the private sector to introduce innovation.

[207] These include risk transfer, whole-life costing, upfront commitment to maintenance, focus on service delivery, innovation, asset utilization, mobilization of additional funding, and accountability.

several factors, including the type of project, the commercial viability of various risk allocation scenarios, as well as the objectives and desired outcomes of the government in procuring the project as a PPP. If the public sector takes on too much risk, it can adversely impact value for money.[208]

Poor project preparation can significantly undermine value for money. Careful project preparation is important to maximize value for money and increase the probability of a successful procurement. However, governments sometimes do not have the necessary resources or experience to prepare projects that are bankable and provide value for money. For instance, the implementing agency may accept too much risk during PPP negotiations, some of which it may not be equipped to adequately manage. Therefore, to minimize risks and maximize value for money, it is essential that governments carefully assess and structure PPP projects through the preparation of appropriate studies (e.g., feasibility, and environmental and social impact), as well as undertaking a robust financial analysis (e.g., cost-benefit and value-for-money analysis), before deciding to implement a project as a PPP. If the government does not have the capacity or experience to undertake these studies, it is necessary to hire professional advisers to support the project preparation process.

Competitive and transparent procurement is critical to maximizing value for money. Even if PPP projects are properly prepared, it is essential that they are then competitively and transparently tendered, negotiated, and managed to ensure that the targeted value for money is achieved. A competitive and transparent procurement process helps maximize value for money by creating competitive tension between bidders. In fact, one of the main weaknesses of unsolicited proposals is that the original proponent is often given a bidding advantage that may include the right to match the price of the winning bidder (i.e., a Swiss challenge), a price advantage, or a points advantage. Providing such bidding benefits to the original proponent often weakens the competitive tension and, thereby, the value for money proposition, as many bidders may decide not to bid for the project on the basis that the original proponent has been given an unfair bidding advantage. Poor project preparation and procurement (e.g., direct negotiation) can lead to suboptimal technical design, high user fees (e.g., tariffs and tolls), long contract duration, excessive government support (e.g., guarantees, availability payments, and tax incentives), and a risk allocation that favors the private sector.

Fiscal commitments, contingent liabilities, and foregone revenues

Although the private sector often provides the financing for PPP projects, the public sector can still have significant financial exposure to the project. The private sector is usually responsible for financing, constructing, and operating a PPP project, and thus assumes a considerable share of the risks. However, the public sector often has considerable financial exposure to the PPP project, which arises from any direct or indirect financial support that it may have agreed to provide to the project and its investors and lenders. PPPs may entail a range of fiscal costs and risks (Table 5.3). Fiscal commitments are liabilities arising from direct financial support by the public sector to the project as stipulated in the PPP agreement. For example, a government may agree to pay a monthly availability payment to the project company in return for constructing and operating a road, subject to that road being 'available' in accordance with the terms of the contract.[209] Contingent liabilities give rise to a potential fiscal commitment since the occurrence, value, and timing of the payments are contingent on certain events that may or may not happen. Examples of contingent liabilities include government payment guarantees (explicit or implicit) linked to financial commitments made by public corporations (e.g., take-or-pay clauses in power purchase agreements) (see fiscal risk matrix Table 1.1).[210] Other contingent liabilities include minimum revenue guarantees, which are only triggered if revenues fall below a certain pre-agreed level, or termination payments if the contract needs to be terminated due to a force majeure event or default of one of the parties. Foregone revenues can also be considerable, with an impact on the budget and even the availability of foreign exchange, especially when tax incentives are overly generous. Therefore, the public sector needs to carefully manage PPP-related fiscal costs and risks, not only on a project-by-project basis but also on a PPP portfolio perspective.

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[208] Prior to procurement, implementing agencies need to carefully assess project risks and develop a provisional risk-allocation and risk-mitigation matrix as part of the project preparation process.

[209] The fiscal costs of PPPs (including foregone revenues) are seldom reflected in budget documentation, particularly in countries with cash-basis accounting.

[210] Take-or-pay obligations provide revenue certainty for the private sector, as the public sector absorbs the demand risk and, often, the foreign exchange risk (if the values are denominated in foreign currency).

Table 5.3: Examples of fiscal costs and risks related to PPPs

Type	Description
Fiscal commitments (direct liabilities)	Contractual obligations where the payment commitments from the government is known, although there may be some uncertainty about the exact value and timing of the payments.
Direct fiscal support to the project itself	**Availability payments:** a regular payment (usually monthly) made by the government over the life of the project, conditional on the availability of the service or asset. **Output-based payments:** payments made by the government based on per unit of service. **Viability gap funding:** a payment made by the government to reduce the capital costs of a project to ensure that a project that is economically feasible but not commercially viable can proceed.
Cost of related investments and associated works	**Resettlement cost:** payment by a government to relocate and compensate project affected persons. **Right of way acquisition:** a government may sometimes need to acquire rights of way so that the project company can deliver the project. **Project related works:** a government may agree to pay for some shared infrastructure (e.g., access roads to a solar park facility).
Contingent liabilities	Contractual obligations where payment depends on some uncertain future event occurring that is mostly outside the control of the government and where the occurrence, value, and timing of any payment is not known in advance.
Guarantees to mitigate particular risks	**Demand or tariff guarantee:** a government undertaking whereby the government commits to a certain level of volume or revenue (minimum revenue guarantee) to the project company. If the volume or revenue is not achieved, then the government is obliged to compensate for the financial shortfall. **Force majeure:** these payment obligations are typically shared between the project company and the government.
Payment guarantees	**Payment guarantees:** these materialize in case of a payment default by a public sector contractual counterparty. Payment guarantees are typically required by lenders, where there is uncertainty in the offtaker's capacity to fulfil its contractual payment obligations.
Termination payment commitments	**Termination payment commitments:** these will vary depending on the nature of the termination event.
Foregone revenues	
Tax incentives	**Tax incentives:** these may include tax exemptions (on profits and imports) and reduced royalty fees.

Source: World Bank.

5.3 PPPs in the Lao PDR

5.3.1 History of PPPs and their performance

Significant economic reforms have been undertaken since the mid-1980s, including the promotion of foreign investment. The government adopted the New Economic Mechanism in 1986 to develop a market-oriented economy in the Lao PDR. The provision of public assets and services has traditionally relied on financing from the government budget and foreign development partners, although the private sector has been playing an increasing role. PPPs have provided a vehicle for foreign direct investment (FDI) in public infrastructure assets and services, while the government has participated directly and indirectly in PPPs (e.g., through SOEs).[211] Most PPP projects

[211] PPPs include independent power producer (IPP) projects. Large SOE investments in power generation, transmission, and distribution have been mainly funded through on-lending and guarantees from the government (amounting to 48 percent of GDP in 2022).

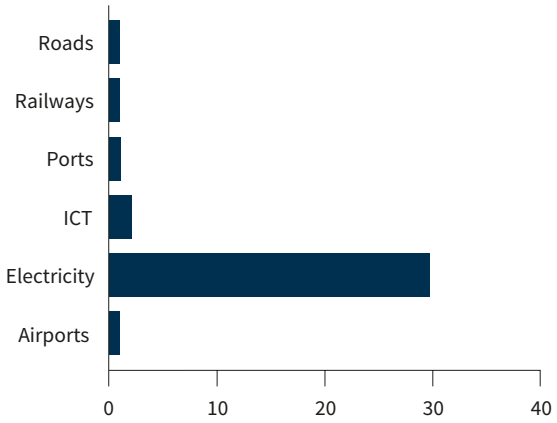
have been directly negotiated, awarded, and implemented on a concession model under the 1989 Law on Foreign Investment and its subsequent revisions. A dedicated PPP unit was established in 2018 in the Ministry of Planning and Investment. It was only in December 2020 that a specific legal document dedicated to PPPs was approved (i.e., the PPP decree).

The current definition of a PPP in the Lao PDR context is unclear, which undermines the use of the current regulatory framework. A lack of clarity and understanding of PPPs has meant that many projects that should be classified as PPPs are not, while projects that have been classified as PPPs are not really PPPs. For example, IPPs in the hydropower sector are often regarded as purely private investments rather than a form of PPP, which potentially undermines the public interest, since they create important public assets (i.e., hydropower plants) that should be carefully managed. In addition, PPPs have been predominately viewed as financing vehicles, rather than as mechanisms to improve service quality and efficiency, thereby weakening the potential benefits that can accrue from PPPs.

The Lao PDR has a long history of PPP projects, mostly BOT projects in the energy sector, but increasingly in the transport sector as well. There is no consolidated database on PPP projects in the Lao PDR with essential project details, such as name of project, type of project, location, implementing agency, sponsors, status, project costs, as well as information on fiscal commitments, contingent liabilities, and foregone revenues. The World Bank's Private Participation in Infrastructure (PPI) project database reports 35 PPP projects that reached financial closure in the period 1990–2022 in the Lao PDR.[212] The earliest project recorded in the PPI database is the Tha Ngone Bridge Project, which reached closure in 1993. However, the database does not capture all projects that have benefited from private sector participation and may not be fully accurate, since it relies on public disclosure.[213] Most of the reported projects procured since 1990 have been in the electricity generation sector and procured on a BOT basis (Figure 5.5). In recent years, there has been significant private sector investment in other sectors (e.g., railway and dry port), with the Laos–China railway project standing out in terms of value (Figure 5.6). While the Vientiane-Boten expressway is currently not in the database, the section from Vientiane to Vang Vieng (which is already in operation) is estimated to have cost around $1.3 billion, with the three remaining sections expected to cost an additional $6 billion. There appears to be an ambitious pipeline of mostly unsolicited PPP projects, mainly relating to railways and roads.[214] Since the interest in PPPs is likely to remain strong, partly owing to limited fiscal space, it is crucial to strengthen the PPP enabling environment. In particular, projects should be aligned with national strategies and plans, and should not be implemented without careful preparation, procurement, and contract management.

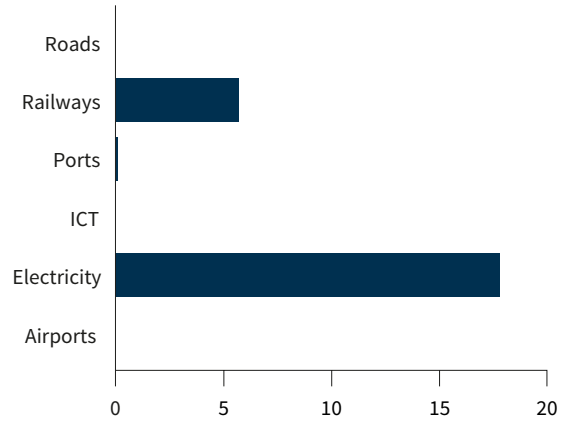
Many of the existing projects were procured on an unsolicited basis, which can undermine value for money. Available information suggests that many of the 35 PPP projects reported originated from unsolicited proposals,

Figure 5.5: Number of projects (1990–2022)



Source: World Bank.

Figure 5.6: Investment (1990–2022, USD billion)



Source: World Bank.

[212] The PPI database includes four types of projects: management & lease (not PPP), brownfield, greenfield, and divestiture (not PPP). For the Lao PDR, all but one (a management contract for an airport) are PPP projects.

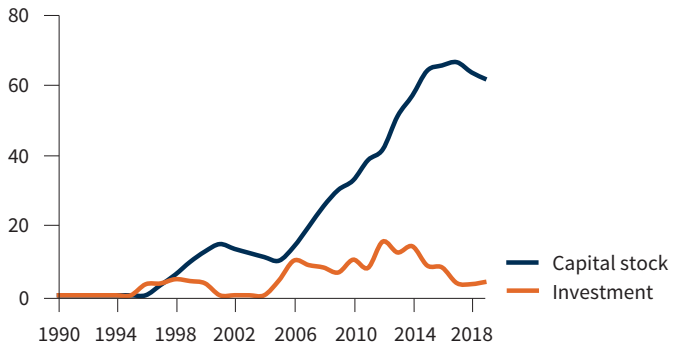
[213] There are over 80 hydropower dams in the Lao PDR, which suggests that many PPPs have not been captured in the database.

[214] Planned projects include several expressways (from Vientiane to Hanoi, Vientiane to Pakse, Vang Vieng to Boten, Boten to Bokeo) and railways (from Vientiane to Pakse, and Thakek to the border with Vietnam).

which probably circumvented the already weak PPP regulatory framework.[215] It is likely that projects initiated by unsolicited proposals (often procured on a direct negotiation basis) did not benefit from a robust feasibility analysis and were not tendered through a transparent and competitive bidding process. This can significantly undermine the project's affordability proposition and value for money, while also undermining planning synergies.[216]

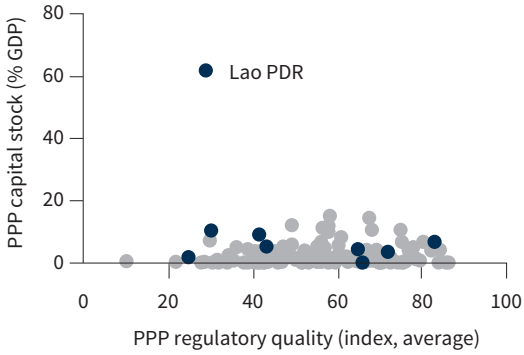
The PPP capital stock is very large by international standards, raising concerns about the size of existing fiscal commitments and contingent liabilities, as well as foregone revenues. PPP investments averaged about 10 percent of GDP per year between 2006–2016 (Figure 5.7). Large PPP infrastructure investments have considerably increased the PPP capital stock, which peaked at 66 percent of GDP in 2017. In 2019, the relative size of the PPP capital stock was far larger than in any other country in the world, while the quality of PPP regulatory practices was comparatively low (Figure 5.8). Therefore, there is an urgent need to develop a robust framework to quantify and manage PPP-related fiscal commitments and contingent liabilities, as well as quantify and assess foregone revenues from tax and royalty exemptions.[217] This will be key to better managing PPP-related fiscal costs and risks.

Figure 5.7: PPP value (% GDP)



Source: International Monetary Fund.

Figure 5.8: PPP capital stock (% GDP, 2019)



Source: International Monetary Fund and World Bank.

PPP performance is relatively low, suggesting that there is significant scope to improve governance arrangements and capacity. The regulatory framework and institutional arrangements for PPPs are not in line with internationally recognized good practices for project preparation, procurement, and contract management. PPP performance scores are low when benchmarked against averages for regional and income peers, especially for project preparation (Figure 5.9).[218] This is concerning, since it is during this stage that the project is defined, structured, and assessed for its suitability to be procured as a PPP. Therefore, it is critical to improve the regulatory framework and institutional capacities to properly prepare PPP projects to ensure that the right projects are selected to be procured as PPPs, and that the projects are adequately structured so that they are bankable, affordable, and provide value for money.

Strengthening the overall enabling environment for PPPs is critical to supporting private sector capital mobilization. To encourage and support private sector participation in the provision of infrastructure outside the energy sector, it is important to strengthen the ecosystem for PPPs. This would require: (i) strengthening the current legal and regulatory framework for PPPs so that there is a clear legislative framework and process for PPPs; (ii) identifying and socializing a pipeline of bankable PPP projects; (iii) ensuring transparency throughout the tender process; and (iv) mandating competitive procurement.

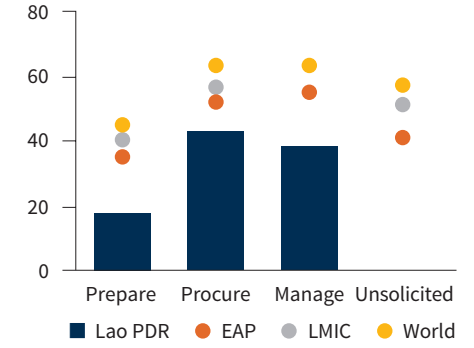
[215] This estimate is likely to be severely underestimated, since most BOT projects in the energy sector are known to have been unsolicited, particularly given limited capacity in the public sector. For instance, the Nam Ngiep 1 Hydropower Project (which is one of the case studies in this chapter) is listed as solicited, when that is not the case.

[216] PPPs can improve project management and enable the public sector to focus on planning, strategic policy, regulation, and monitoring. However, planning can be undermined if most PPPs are unsolicited and not part of a public investment plan. It is vital to scrutinize and prioritize PPP project proposals to ensure they are consistent with existing public investment plans.

[217] The PPI database shows there is substantial public participation in financing PPP projects. In the energy sector, some of this is likely through EDL, EDL-GEN, and Lao Holding State Enterprise (LHSE).

[218] The benchmarking results are based on responses from the relevant PPP units in each country. In the case of the Lao PDR, there was no response to the questions on unsolicited proposals.

Figure 5.9: PPP regulatory quality (index)



Source: World Bank.

5.3.2 Legislation, regulations, and institutions

The successful implementation of PPP projects relies on a sound legal and regulatory framework that promotes good governance and clearly defines roles and responsibilities. A PPP framework comprises policies, rules, procedures, and institutions that define how PPPs are identified, assessed, selected, prioritized, budgeted, procured, monitored, and accounted for. The framework should also define the public sector institutions responsible for each of these tasks, while promoting accountability, transparency, access to information, participation, fairness, and integrity. This can help ensure that PPP projects are aligned with the government's development strategy, maximize economic and social returns (while preserving the environment), and do not generate unnecessary fiscal risks.

Legal and regulatory framework

The current PPP legal and regulatory framework in the Lao PDR comprises several laws and decrees. The general legal and regulatory framework for PPPs comprises the Investment Promotion Law, the State Investment Law, the Public Procurement Law, the Decree on the Controlled Business and Concession List, and the Decree on Public-Private Partnerships. PPPs may be further regulated through sector-specific laws and regulations, such as the Electricity Law, which contains several provisions relating to the assessment, award, and contract terms of projects relating to transmission and generation.

Until the PPP decree came into force, PPP projects were implemented under different laws. Until January 2021, when the PPP decree came into effect, most PPP projects were implemented under either the Investment Promotion Law or the Electricity Law. However, neither of these laws specifically addressed PPPs, and thus were not drafted to reflect the unique characteristics of PPP projects. Therefore, the government instructed the Ministry of Planning and Investment (MPI) to prepare a PPP decree that specifically addressed PPPs. In particular, the PPP decree was drafted to provide clarity on the processes and the roles and responsibilities of the various parties to a PPP contract in terms of project preparation, procurement, and project management. The PPP decree also provided clarity on the sectors open for PPPs, the type of acceptable PPP investment structures, the processes for approving unsolicited proposals, and the types of government support that can potentially be made available.[219]

While the PPP decree does provide more clarity, there are several areas that could be further clarified and strengthened. The decree is only an implementing regulation that must be read in conjunction with the Investment Promotion Law, State Investment Law (which governs the use of state funds), and the Public Procurement Law (in circumstances where the PPP project provides services directly to the state). Given that a decree is subordinate to a law, this means these laws take precedence in case of inconsistencies. Moreover, no complementary policies and guidelines have been produced to support the implementation of the decree. This, coupled with scarce financial and human resources, limited understanding and experience of PPP concepts and processes, and the absence of a specific pipeline of PPP projects, has severely constrained the use of the relevant legislation in support of PPPs.[220]

[219] The decree mentions two forms of partnerships: (i) partnerships with public financial contributions; and (ii) partnerships where investment capital is borne entirely by private parties.

[220] Given the current lack of clarity of what constitutes a PPP in the Lao PDR, it is important to provide a clear definition of PPPs that is in line with international definitions. This would ensure that all relevant projects are prepared and implemented in accordance with the relevant laws and regulations governing PPPs.

Most PPP projects are still being procured outside the process specified in the PPP decree. Despite the introduction of the decree, most PPP projects are still being procured on a negotiated basis outside the processes and approval mechanisms set out in the decree. Most of these projects originate from unsolicited proposals. These often receive approval from senior government officials before being passed to the relevant line ministry or agency to finalize the contract and support implementation. However, most line ministries and agencies do not have the capacity or resources to accurately assess the technical and financial aspects of PPP projects, which means the public sector may: (i) take on fiscal risks that it cannot afford or manage; and (ii) allow the private sector to generate excessive returns. In this context, it is crucial to develop a framework to properly manage unsolicited proposals and ensure that line ministries and agencies have the capacity and resources to assess and prepare PPP projects.

To overcome the inherent weaknesses of PPP-related decrees and regulations, some countries in the region have approved PPP laws. Vietnam initially used a decree to govern the use of PPPs. However, inconsistencies between this decree and other legislation (e.g., laws) created uncertainty over the authority and relevance of the decree. To address these issues, the National Assembly ratified a PPP law in June 2020. In November 2021, Cambodia enacted a PPP law to replace the 2007 Law on Concessions. It is understood that the Lao PDR is planning a new PPP law to be submitted to the National Assembly in late 2024. The main objective of the new PPP law should be to ensure that all projects are processed in accordance with the requirements of the law.

Institutional framework

PPP projects need to be approved by the Prime Minister's Office and may require additional approvals. Under the PPP decree, projects require approval from one or more public entities, depending on several factors (Table 5.4). All PPP projects, with very few exceptions, must be approved by the Prime Minister's Office. Projects under $300 million only require approval from the Prime Minister's Office if no funding from the state budget is required and there are no significant social and environmental impacts.[221] In other circumstances, projects may need approval from a Provincial Assembly or the National Assembly.

Table 5.4. Institutional PPP approval requirements

Criteria for approving authority	Prime Minister's office	National Assembly	Provincial Assembly
Project investment value	Not more than $300 million	More than $300 million	
Requirement for state funding	No funding from the budget is required	If state funding exceeds 20 billion kip	If funding does not exceed 20 billion kip
Requirement for the conversion of conservation or national protected forest, the diversion of water flows or resettlement	No requirement for conversion of conservation or national protected forest or the diversion of water flows and resettlement of more than 500 households	If project requires the conversion of conservation or national protected forest, the diversion of water flows or the resettlement of more than 500 households	If the project requires the conversion of degraded or barren forest land
Others		Moderate (e.g., output specifications, procurement and monitoring)	

Source: World Bank staff based on the Decree on Public–Private Partnerships.

Responsibility for PPPs has been mainly assigned to the Ministry of Planning and Investment (MPI). The MPI, through the Investment Promotion Department and its One Stop Service Office, is responsible for administering the foreign investment framework and reviewing investment applications in accordance with the Law on Investment Promotion. In particular, the department is responsible for screening projects, providing summary reports to the government, and implementing activities to promote private sector investment, including PPPs. Within MPI's Investment Promotion Department, the Public-Private Partnership Division has been established to help manage the PPP program. However, the division is currently understaffed given its responsibilities and obligations.

[221] This restriction does not find support in the Investment Promotion Law and may not be enforceable.

The preparation and successful implementation of PPP projects requires dedicated and experienced resources. The development, procurement, and management of PPP projects is very different to those projects procured through traditional public procurement. PPP projects require a certain set of skills and experience to ensure they are structured in a way that is bankable, affordable, and maximizes value for money. Therefore, it is important to strengthen the capacity and resources of the Public-Private Partnership Division, so that it can fully support ministries and agencies to identify, screen, prepare, procure, and manage PPP projects.

In addition to MPI, the Ministry of Finance has an important gatekeeper role to play in the approval process for PPP projects. The role of the Ministry of Finance is particularly important with respect to assessing, approving, and managing fiscal costs and risks that may arise from PPP projects. However, while the Ministry of Finance is part of the Committee for Partnerships Promotion and Management, the PPP decree is relatively silent on the specific roles and responsibilities of the Ministry of Finance in terms of assessing and managing PPP-related fiscal costs and risks (e.g., foregone revenues).

It is of central importance to develop a robust framework to manage PPP-related fiscal costs and risks. Given the fiscal constraints the government is currently facing and the fact that these constraints have partially been driven by liabilities arising from past PPP projects, it is essential that the government establishes a robust institutional framework and process that systematically assesses and manages both historic and future PPP-related fiscal costs and risks.

5.3.3 Case studies

Case studies can offer important lessons for future PPPs, while regular assessments should be undertaken by all ministries that implement PPP projects. This sub-section presents two case studies of PPP projects that have been implemented in the Lao PDR to help shed some light on the strengths and weaknesses of the current PPP enabling environment. It mainly assesses PPP processes and capacities, rather than the intrinsic quality of the project (such as its technical and financial aspects).[222] The authorities provided access to documentation for both projects, which were a vital source of information. This was complemented by stakeholder interviews. While the Ministry of Energy and Mines (MEM) and Électricité du Laos (EDL) appear to have developed some capacity to assess the technical and financial aspects of PPP projects in the energy sector, the implementation of PPP projects in the transport sector is much more recent. Since the Vientiane–Vang Vieng Expressway Project was the first PPP contract that the Ministry of Public Works and Transport (MPWT) negotiated, it is understood that the ministry is currently assessing the lessons that can be learned. In fact, ex-post assessments of existing PPPs can be extremely beneficial.

Nam Ngiep 1 Hydropower Project

This PPP project is a BOT arrangement for the construction and operation of a hydropower plant. The Nam Ngiep 1 Hydropower Project involves the construction and operation of a 290-megawatt hydropower generation facility at the Nam Ngiep River in the provinces of Bolikhamxay and Xaysomboun. Like many other hydropower projects, it is a BOT arrangement. The project started as an unsolicited proposal in the early 1990s, but when the memorandum of understanding with the original developers expired, the government approached the Japan International Cooperation Agency (JICA) to conduct a full feasibility study into the project's social and environmental impacts, as well as its technical and commercial aspects. After many years and several studies, the Nam Ngiep 1 Power Company was established to develop the project with Japan's Kansai Electric Power Company (Kansai) having a 45 percent share, the Electricity Generating Authority of Thailand (EGAT) having a 30 percent share, and the Lao Holding State Enterprise (LHSE) having a 25 percent stake.[223] The concession period is 27 years, after which the assets will be transferred to the public sector. The construction of the project started in late 2014 and was completed in September 2019. The project's costs were around $870 million, and the electricity being generated is sold to EGAT (95 percent offtake) and EDL (5 percent offtake) under a power purchase agreement

[222] For instance, it does not evaluate the adequacy of government support, take-or-pay clauses, or user-fee levels. It also does not assess economic, social, and environmental impacts.

[223] The LHSE is a state-owned enterprise that holds government shares in power projects. If SOE debt is on-lent or guaranteed by the government, it is classified as public and publicly guaranteed (PPG) debt. If SOE debt in not guaranteed by the government, then it is an implicit contingent liability. This case study does not assess the underlying power-purchasing agreement.

[224] See LHSE website.

signed with the Nam Ngiep 1 Power Company. During the 27-year operating concession, the project is expected to contribute more than $600 million to the Lao PDR through royalty fees, taxes, and dividends paid to LHSE.[224] Set out below are some of the lessons from this case study.

The importance of building the necessary capacity to assess the technical and financial aspects of a project to ensure value for money is being achieved. While MEM and EDL have built up some capacity to assess the technical and financial aspects of independent power producer (IPP) projects (e.g., costings), this capacity needs to be enhanced. In-house technical and financial capacity is critical to properly assess private sector proposals to ensure that the project provides value for money to the public sector and the government is not enabling excessive returns to the private sector. If such capacity is not available within a particular ministry or agency, then resources should be made available to hire external advisers that have the necessary skills and experience.

The importance of preparing bankable contract templates. Preparing standard contract templates for an IPP/PPP project on a sector-by-sector basis can help expedite the procurement and signing of PPP contracts, as both the implementing agency and private sector proponent will then be familiar with the terms and conditions of the agreement. However, it is important that such standard contracts have been structured based on feedback from the private sector and are viewed as being bankable by investors and lenders. While MEM and EDL have developed standard contract templates to try and expedite the project development process, these templates have often been viewed as not being bankable due to the underlying risk allocation, which undermines their usefulness in terms of expediting the procurement process.

The importance of ensuring that PPP projects are planned and procured on a portfolio basis rather than on a project-by-project basis. While coordination in planning and investment is important in all sectors, it is particularly crucial in the energy sector to ensure that (i) the demand and market for the power being generated by an IPP is identified ahead of time to avoid the risk of having excess capacity (as is currently the case); and (ii) the transmission and distribution network is in place to transport the electricity generated to demand centers. While this project is dispatching 95 percent of its energy to EGAT in Thailand, many other IPPs are having challenges in dispatching their capacity.

The importance of stakeholder consultations and disclosure. It is important to ensure the government and the project company have robust consultations with all stakeholders during the project preparation and implementation stages. It is also crucial that the project company is required to provide timely and accurate information to the government and other stakeholders. The requirement to provide information should be specified in the concession or project agreement. The type of information that needs to be disclosed may vary depending on the stakeholder. For instance, the government's project management unit will require detailed performance and financial reports, while the public and other stakeholders not party to the contract will only need high-level (non-confidential) information. The Nam Ngiep 1 Power Company provides very detailed information on the status of the project in a dedicated website, including monthly environmental management reports.[225]

There are benefits of having international investors and development partners participate in a project. This project benefited from the involvement of Kansai and EGAT as investors, and the Asian Development Bank (ADB) and Japan Bank for International Cooperation (JBIC) as lenders to the project. The involvement of international investors not only brought considerable international experience to the design, construction, and operation of the project, it also helped to catalyze international financing from a group of Japanese and Thai banks. This commercial financing was also supported through the commitments of both ADB and JBIC to the financing, as their involvement gave additional confidence to the commercial banks that (i) the environmental and social impacts of the project would be well managed; and (ii) if there were any problems with the project, ADB and JBIC would have more authority and influence than the banks to help solve these problems. Looking forward, the government should encourage international investors to bid on PPP projects, which can help bring in international expertise as well as much-needed commercial bank financing. However, for international investors and banks to support projects in the Lao PDR, it is important that projects are well prepared and bankable, and that the government commits to a transparent and competitive bidding process.

[224] See LHSE website.

[225] See Nam Ngiep 1 Power Company website.

Vientiane–Vang Vieng Expressway Project

This PPP project is a BOT arrangement for the construction and operation of an expressway. The Vientiane–Vang Vieng expressway is the first of four sections of the Laos–China expressway, which will run between Vientiane and Boten in Luang Namtha. The expressway has been developed as part of China's Belt and Road Initiative and is the first expressway to be built in the Lao PDR. This section is 113.5-kilometers long and 23-meters wide in a two-way four-lane configuration. It features several bridges and a tunnel, with eight toll gates along the way. The expressway runs parallel to the existing National Road 13 North. The project was initiated under an unsolicited proposal by China's Yunnan Construction and Investment Holding Group, which holds a 95 percent shareholding in the project, with the remaining 5 percent held by the government. The total cost of the expressway was around $1.3 billion. Construction started in 2018 and the expressway was officially opened in December 2020. The expressway has cut the traveling time between Vientiane and Vang Vieng from around 3.5 hours to about one hour. This is a BOT project under a 50-year concession agreement, with revenues relying entirely on tolls collected from road users. It is understood that the government was not required to provide financial support or other contributions to the project, aside from providing the necessary approvals. In particular, the costs of land acquisition and resettlement were factored into the capital costs of the project. Set out below are some of the lessons from this case study.

The importance of having the necessary time and resources to adequately assess the technical and financial proposals. As this project originated from an unsolicited proposal, the Ministry of Public Works and Transport (MPWT) had not prepared or studied technical proposals (e.g., cost estimates) for this expressway prior to the unsolicited proposal being submitted. Given the very short negotiation period, the ministry was under pressure to assess the proposal and negotiate the concession agreement without having the necessary technical and financial resources. Having the necessary skills and experience to assess the technical and financial proposals is particularly important in the case of an unsolicited proposal, to ensure that the proposed costs are reasonable and that the proponent is not making excess profits through the road tolls and length of the concession. In addition, it is important for the government to carefully assess the tax benefits and royalty exemptions requested by the project developer to avoid unnecessary foregone revenues.

The importance of ensuring that the unsolicited proposal is submitted with a robust feasibility study that has detailed traffic studies, costings, and alignment options. It is understood that the feasibility study prepared by the developer only presented one alignment (i.e., route), when it would normally be expected that two or more alignment options would be presented with associated costings. This highlights the importance of putting in place clear guidelines that set out the minimum technical (as well as financial) information required for an unsolicited proposal to be accepted for review.

The importance of having a risk allocation and concession contract template, together with appropriate legal resources, to support the negotiation over the concession contract. As MPWT had not entered into a PPP contract before, it did not have a contract template that could be used as a basis for negotiation. In addition, they did not have sufficient funding to hire a legal firm that had experience in negotiating such contracts. The concession contract is a binding legal agreement that sets out the terms and conditions, as well as the rights and obligations, of the public and private sectors under the project. It is therefore critical to have access to experienced professionals and sector experts (e.g., lawyers, engineers, and financial advisers) that can thoroughly review and support the investment committee to negotiate the PPP contract.

The importance of ensuring adequate consultation with all stakeholders including project affected parties. Given the expedited timetable to negotiate and implement the project, there was insufficient time to engage with the various stakeholders, including at the local level. This lack of consultation caused some issues with the implementation of the project (e.g., some residents were unhappy that parts of the expressway alignment cut across existing roads or paths). It is vital to undertake adequate and timely consultations with various stakeholders, and that the project developer puts in place a robust grievance redress mechanism to deal with any issues and complaints that may arise.

The importance of monitoring the project's performance during construction and operation. Given the expedited timetable for implementation, the developer mobilized and initiated construction very quickly. As a result, there was a delay by the government in putting in place a monitoring framework, and when an engineer was appointed, construction was already relatively well advanced. Although the government has a 5 percent equity stake, it has limited influence in the day-to-day management of the concession. Putting in place a robust monitoring and reporting framework is critical to ensure that the government is provided with timely and detailed

reports on construction and operational performance. This requirement on the project developer to provide project reports needs to be clearly laid out in the concession agreement.

PPPs are not 'free', even when the public sector does not provide any direct or contingent financial support to a project. It is critical to carefully assess the costs of technical and financial proposals (particularly in terms of the tolls being charged, as well as the tax and royalty exemptions being sought) to ensure that projects are providing value for money to the public. While the government may not have provided direct or contingent financial support to the project, and even received a small equity stake at no cost, the project is not 'free' as the end users must pay for the project through (rising) tolls over the term of the concession. The government may also be foregoing revenue through the various tax incentives that it may have granted.

5.4 Conclusion and recommendations

Substantial private sector finance has been mobilized through public-private partnerships, but projects have likely provided limited value for money and have increased fiscal costs and risks. No other country in the world has relied more heavily on public-private partnerships (PPPs) than the Lao PDR. PPPs have been the preferred mechanism to exploit the country's large hydropower resources for several decades. More recently, limited fiscal space has increasingly led to the use of PPPs in other sectors, such as transport. However, weak governance structures (e.g., institutional, legal, and regulatory) and limited capacities to assess, prepare, and negotiate PPPs have likely resulted in suboptimal value for money for the public sector and end users. They have also led to an increase in fiscal commitments, contingent liabilities, and foregone revenues.[226] There seems to be a large pipeline of mainly unsolicited PPP projects, which should be carefully scrutinized before contracts are awarded.

PPPs can generate several benefits, but these are not automatic and depend on the fulfillment of certain conditions. Investing in infrastructure is key to supporting economic growth, but there is currently limited fiscal space to undertake significant investments. Mobilizing private sector capital through PPPs can help leverage limited fiscal resources for infrastructure development. They can also lead to a more efficient and effective delivery of infrastructure assets and services. However, PPPs are not 'free', as they need to be ultimately paid for by the public sector or end users. PPPs need to be carefully prepared, procured, and managed for potential benefits to be realized.

PPP arrangements can entail fiscal costs and risks that are often overlooked or underestimated. The private sector needs to be paid for providing public assets and services, usually through availability payments, user fees, or a combination of both. Governments may also need to provide direct and contingent fiscal support to help make PPP projects viable by mitigating some of the risks arising from projects (e.g., demand, revenue, political, and early termination risks). Generous tax incentives are often provided, which entail large revenue losses and deprive the country of valuable foreign exchange. These fiscal costs and risks are often overlooked when assessing PPP arrangements, partly due to their complex nature and the longer time horizon (i.e., liabilities and revenues spread into the future). PPP projects should therefore be scrutinized using the same standards applied to public investment projects, such as efficiency, effectiveness, equity, and sustainability.[227]

Several reforms should be undertaken to strengthen PPP governance and capacities, taking into account lessons learned from other countries. It is important to enhance the overall ecosystem for PPPs by creating a robust enabling environment to support the development of a successful PPP program that delivers value for money. The Lao PDR can benefit from the experience of other countries in the region, such as Thailand, Malaysia, Indonesia, and Philippines, to help develop a successful and fiscally sustainable PPP program. However, mixed experience with PPP projects across the world suggests that PPPs are not a panacea.[228]

Upgrading the Decree on Public-Private Partnerships to a law and developing related guidelines will strengthen the legal and regulatory framework. The current PPP decree needs to be read in conjunction

[226] For instance, some hydropower projects have provided limited revenue to the government due to generous tax incentives, have not improved service delivery in the country, especially in the case of export-oriented projects, and have created large contingent liabilities for the government (e.g., through take-or-pay clauses in power purchase agreements involving state-owned enterprises).

[227] For instance, there is a need to assess distributional impacts (equity) and ensure that the demand for the proposed services is sufficient (sustainability).

[228] See the PPP Knowledge Lab's reference guide, where several successful and unsuccessful case studies are presented.

with several other laws relevant to PPPs, such as the Investment Promotion Law, State Investment Law, Public Procurement Law, and Electricity Law. Since a decree is subordinate to a law, these laws take precedence in case of inconsistencies, which weakens the effectiveness of the decree. These inconsistencies create uncertainty and have resulted in many PPP projects being procured outside the decree. Therefore, it is critical to upgrade the decree to a law to ensure that all PPP projects are implemented in accordance with the provisions of the law and the supporting implementing guidelines. The new law should include a definition of PPPs that is in line with international good practices. It should clearly specify the processes for implementing solicited and unsolicited PPP projects to ensure they are adequately identified, screened, prioritized, prepared, procured, and managed.[229] The law should also assign specific responsibilities to the relevant ministries and agencies. In particular, the law should assign responsibility to the Ministry of Finance to determine whether the project generates value for money; assess, approve, and budget for any government support that is provided to the project (including tax incentives); and monitor the performance of the project to manage fiscal risks. In addition, implementing regulations should be prepared to support the implementation of the new law (e.g., regulations with respect to identifying PPP projects, managing unsolicited proposals, and monitoring PPP-related fiscal costs and risks).

Enhancing the capacity to prepare, procure, and manage PPP projects and improving interagency coordination will help maximize value for money. Given the weak performance across the lifecycle of PPP projects, it is critical to strengthen the capacities to prepare, procure, and manage PPP projects across all levels of government. Project appraisal can be improved by developing rigorous criteria, tools, and implementation guidelines to comprehensively assess economic and financial viability.[230] Capacities can be enhanced through workshops, knowledge sharing by regional peers, and access to PPP resources (e.g., online materials). It is vital to ensure that the existing PPP unit in the Ministry of Planning and Investment has both the authority and capacity to act as a center of excellence for PPPs in the country.[231] In addition, smaller PPP coordination units should be established in ministries that are likely to be active in the implementation of PPP projects (e.g., Ministry of Public Works and Transport). This will help build PPP capacity at the sector level, as well as reduce some of the workload on the central PPP unit. Finally, it is important to improve interagency coordination, since PPPs often entail the involvement of several public institutions (e.g., line ministries, state-owned enterprises, Ministry of Planning and Investment, Ministry of Finance, Prime Minister's Office, and National Assembly). It is critical that all stakeholders follow the established PPP processes.

Establishing clear institutional structures, responsibilities, and processes for assessing, approving, and managing PPP-related fiscal costs and risks is key to improving their governance. If fiscal commitments, contingent liabilities, and foregone revenues are not carefully assessed and monitored during the lifecycle of the PPP project, they may create a significant fiscal burden. This includes financial commitments made by state-owned enterprises (e.g., take-or-pay clauses in power purchase agreements), as well as generous tax incentives (e.g., profit tax and import duty exemptions). Developing a robust framework to assess, approve, budget, manage, and monitor fiscal costs and risks can help mitigate this. In this context, it is important that a clear institutional structure is established to manage the fiscal exposure and budgetary implications of individual PPP projects. Clear reporting requirements for all relevant stakeholders also need to be in place. The Ministry of Finance (MoF) should be responsible for oversight and gatekeeping functions, particularly with respect to assessing the impacts of PPP-related fiscal costs and risks from the perspective of long-term liability management, budget priorities and constraints, and macroeconomic management. To support them in this role, the MoF should establish a standardized methodology for quantifying fiscal costs and risks to guide implementing agencies in their reporting and to help the MoF in preparing its analyses.[232]

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[229] Detailed guidelines should be issued for processing unsolicited proposals, since it is critical to ensure these are economically and financially viable. Unsolicited proposals should be assessed and approved using the same framework as solicited proposals, and they should be competitively tendered.

[230] It is important to carefully assess technical and financial proposals (e.g., project costs and returns required) to ensure that the public entity is not enabling excess returns to the private sector (e.g., through an overly lengthy concession, large availability payments or tariffs, unfavorable take-or-pay clauses, or generous tax incentives). The PPP unit or implementing agency should also develop a robust monitoring framework to ensure that the private sector entity is complying with all its obligations under the PPP contract.

[231] The roles and responsibilities of the central PPP unit need to include: (i) developing a clear policy and strategy for PPPs; (ii) preparing relevant legislation and guidelines to support the preparation and implementation of PPPs; (iii) developing and socializing a pipeline of priority PPP projects; (iv) providing technical support to ministries and agencies; (v) developing standard templates (e.g. request for proposal, contract, and risk allocation templates); (vi) assessing and commenting on PPP proposals; and (vii) providing PPP capacity building through workshops and trainings.

[232] The MoF could consider using the PPP Fiscal Risk Assessment Model (PFRAM), which is an analytical tool jointly developed by the International Monetary Fund (IMF) and the World Bank to assess potential fiscal costs and risks arising from PPP projects.

Mandating transparent and competitive procurement is crucial to maximizing value for money. It is important to ensure that information on potential PPP projects is shared transparently with all stakeholders and that all PPP projects (including unsolicited proposals) are competitively tendered. Transparent and competitive procurement creates a level playing field for all bidders, which encourages private sector investors to bid for projects. This benefits the public sector because a larger number of bidders usually entails greater competition, which can help maximize value for money. Competitive procurement should also be undertaken for the management of assets that soon will be transferred to the public sector, especially in the energy sector. Moreover, publishing PPP documents (e.g., PPP pipeline, appraisal studies, and reports on fiscal commitments) will promote greater overall transparency.

Establishing a revolving project development fund would support project preparation and structuring. Project preparation and structuring can be time consuming and expensive. It often requires the preparation of various studies (e.g., feasibility, technical design, demand, environmental, and social impact) and documentation (e.g., requests for proposal and contracts) that requires a highly skilled team. Given the current low capacity levels within the public sector, the PPP unit or implementing agency should hire transaction advisers (e.g., technical, financial, legal, environmental, and social) to support key tasks. This could be supported by the establishment of a dedicated PPP project development fund. Successful PPP project development funds have been established in Indonesia and Philippines. However, it is crucial that any such fund has a clear and transparent governance and funding structure.

[232] The MoF could consider using the PPP Fiscal Risk Assessment Model (PFRAM), which is an analytical tool jointly developed by the International Monetary Fund (IMF) and the World Bank to assess potential fiscal costs and risks arising from PPP projects.

Table 5.4: List of PPP projects (1990–2022)

Year	Project	Type	Sector	Contract (years)	Gov. Support	Private (%)	Invest ($)	Award method	Main revenue	UP
1993	Tha Ngone Bridge Project	BOT	Roads	15	..	50	..	..	..	Yes
1993	Houay Ho	BOT	Electricity	30	..	80	220	CB	..	No
1996	Lao Telecom (M-Phone)	BROT	ICT	25	..	49	92	..	..	Yes
1996	Theun Hinboun	BOT	Electricity	30	..	40	665	..	..	Yes
2002	Vimpelcom Lao	M	ICT	20	..	78	9	..	..	Yes
2005	Nam Theun 2	BOT	Electricity	25	..	75	1,250	DIN	PPA	Yes
2006	Nam Ngum 2	BOT	Electricity	25	..	71	760	DIN	PA	Yes
2006	Xekaman 3	BOT	Electricity	29	..	85	310	DIN	PA	Yes
2008	Nam Ngum 5	BOO	Electricity	..	..	85	200	..	..	Yes
2008	Nam Nhone	BOT	Electricity	..	..	100	5	LS	..	Yes
2010	Hongsa Coal Plant	BOO	Electricity	25	PG	80	3,710	DN	PPA	No
2010	Nam Lik 1-2	BOT	Electricity	25	PG	92	150	DN	PA	Yes
2011	Nam Long	BOT	Electricity	..	PG	100	14	..	PPA	Yes
2011	Xekaman 1	BOT	Electricity	30	PG	70	442	DN	PPA	No
2012	Nam Tha 1	BOT	Electricity	..	PG	75	317	LS	PA	No
2012	Nam Kong 2	BOT	Electricity	..	PG	100	71	LS	PPA	No
2012	Nam Ngiep 1	BLT	Electricity	..	PG	75	982	..	PPA	No
2012	Xe Katam	BOT	Electricity	..	..	75	120	LS	PPA	No
2012	Nam Ngum 3	BLT	Electricity	27	PG	77	1,200	LS	PA	No
2012	Nam Kong 1	BLT	Electricity	..	PG	80	168	..	PPA	No
2012	Xekong 4	BOT	Electricity	..	PG	80	600	LS	PPA	No
2012	Xekong 5	BOT	Electricity	..	PG	100	..	LS	PPA	No
2012	Nam Mang 1	BOT	Electricity	..	..	100	..	LS	PA	No
2012	Nam Khan 2 and 3	BOT	Electricity	..	PG	85	430	LS	PA	No
2012	Nam Ou 1-7	BOT	Electricity	..	PG	100	2,000	LS	PPA	No
2012	Xekaman 4	BOT	Electricity	..	PG	100	..	LS	PPA	No
2014	Nam Ngiep 1	BOT	Electricity	27	PG	75	980	LS	PA	No
2014	Xe-Pian Xe-Namnoy	BOO	Electricity	..	..	93	1,046	..	User fees	No
2017	Don Sahong Hydropower	BOT	Electricity	..	..	80	500	..	..	Yes
2017	Nam Theun 1	BOT	Electricity	27	..	85	1,300	LS	PA	Yes
2017	Xe Namnoy 2 and Xe Katam 1	BOT	Electricity	..	..	100	50	LS	PA	Yes
2019	Laos–China Railway	BOT	Railways	..	..	70	5,700	DN	User fees	No
2019	Nam Che 1	n/a	Electricity	25	..	100	49	..	PA	Yes
2022	Thanaleng Dry Port	BOT	Ports	50	..	100	92	..	..	Yes

Source:World Bank (PPI Database).

Note: Build, operate, and transfer (BOT); Build, rehabilitate, operate, and transfer (BROT); Management contract (MC); Merchant (M); Build, own, and operate (BOO); Build, lease, and transfer (BLT); Not available (..); Payment guarantee (PG); Competitive bidding (CB); Direct negotiation (DN); License scheme (LS); PPA/WPA payments (PPA); Purchase agreements or transmission fees with public entity(ies) (PA); Unsolicited proposal (UP). Information may not be accurate, since it relies on publicly available information.

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