



Assessment of Public-Private Partnerships in Cambodia

Constraints and Opportunities





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Currency Equivalent

(as of 13 December 2011)

Currency Unit = riel (KR) KR1.00 = \$0.000241.00 = KR3,973.83

Abbreviations

ADB Asian Development Bank AFD Agence Française de Développement (French Development Agency) BOO build-own-operate BOT build-operate-transfer CDC Council for the Development of Cambodia Council of Ministers COM CPS country partnership strategy CPTL Cambodia Power Transmission Line EAC - Electricity Authority of Cambodia EDC Electricité du Cambodge FBC final business case foreign direct investment FDI GCA government contracting agency GDP gross domestic product GMS Greater Mekong Subregion International Bank for Reconstruction and Development IBRD IFF infrastructure financing facility IGF infrastructure guarantee facility IMF International Monetary Fund IPP independent power producer JICA Japan International Cooperation Agency riel KR IAF land acquisition fund LOC Law on Concessions MCA multi-criteria analysis MOC

Ministry of Commerce

MEF Ministry of Economy and Finance MIME Ministry of Industry, Mines and Energy MPWT Ministry of Public Works and Transport

 Ministry of Rural Development MRD NBC National Bank of Cambodia

NSDP National Strategic Development Plan

OBC outline business case

ODA official development assistance PDF project development facility

PFS pre-feasibility study

- private participation in infrastructure PPI

PPP public–private partnership PRC People's Republic of China

PSDC Private Sector Development Steering Committee

 rural electricity enterprise REE RFQ request for qualification RFP request for proposal risk management unit RMU SOF state-owned enterprise

S-PATA small-scale policy and advisory technical assistance

 State Secretariat of Civil Aviation SSCA

 technical assistance TA terms of reference TOR

UNCITRAL – United Nations Commission on International Trade Law

 United States US

USAID United States Agency for International Development

VFM value for money viability gap fund VGF WLC whole-of-life cost WTO World Trade Organization

Weights and Measures

kilometer km kV kilovolt kWh kilowatt-hour MW megawatt

Executive Summary

Key Findings

The Cambodian economy recovered strongly after the financial crisis in 2008, with increasing levels of foreign direct investment (FDI). The country has many attractive features for investors, including a low-cost workforce, improving transport connectivity with neighboring countries, and a large and growing consumer base. There are substantial underutilized resources in the agriculture sector, and the government is starting to develop a small oil industry, with first production expected in late 2012. Despite the many positive characteristics of the economy, the business climate for the private sector is challenging. Cambodia was ranked 147 out of 174 countries in the World Bank's Doing Business survey for 2011. In a similar study conducted by the World Economic Forum, Cambodia's ranking in The Global Competitiveness Report 2011-2012, increased 12 places to 97 out of 142 countries. Despite these improvements, weaknesses in the business climate continue to be a significant problem. Corruption, regulatory uncertainty, cost and availability of power, political instability, and poor logistics were cited by businesses as major constraints. The finance sector can only provide short-term debt, interest rates are high, and financial intermediation is constrained by the lack of an interbank market. The country lacks infrastructure, and further investment is required to improve competitiveness.

The low coverage of infrastructure in Cambodia compared to other countries in Asia has a negative impact on economic growth and the development of new sectors. Cambodia faces substantial challenges providing new and improved infrastructure for its growing economy. Industrialization and urbanization rates are rising rapidly, driving increasing demands for new and improved infrastructure and related services. Government investment programs for infrastructure are articulated in long-term sector development plans. The total investment in infrastructure in Cambodia is estimated to be in the range of \$12 billion—\$16 billion from 2013 to 2022 although in practice, this figure could be much higher, given estimated investment needs in sectors such as water. Infrastructure investment is state-led, and the public sector capital investment rate as a percentage of gross domestic product (GDP) is approximately 6% per year. This figure is broadly in line with international standards, although it is low compared to countries such as the People's Republic of China (PRC) and Viet Nam, which are achieving levels of approximately 10% per year.

The Government of Cambodia has been taking steps to improve the investment climate and levels of investment in infrastructure. Comprehensive sector development plans for infrastructure have been prepared, but implementation is constrained by institutional

weaknesses and limited borrowing capacity. Most funding for infrastructure is sourced from user fees for services provided by state-owned enterprises (SOEs), and through public sector borrowing on a concessional basis. SOEs have limited capacity to borrow due to the lack of availability of long-term debt in local financial markets. The amount of public sector borrowing is limited by the size of the country's tax base, which is low and does not reflect the demand for infrastructure facilities and services. In December 2011, all public sector debt, by law, was sourced on a concessional basis, and there was no commercial debt program. Government and official development assistance (ODA) funding resources are insufficient to meet Cambodia's large infrastructure funding needs. To date, the government has not sought less concessional ODA from sources such as the International Bank for Reconstruction and Development (IBRD) and ordinary capital resources of the Asian Development Bank (ADB) to meet its large infrastructure investment needs due to concerns about its borrowing capacity.

Public–private partnership (PPP) can help the government meet this financing gap by stimulating private sector investment and financing for infrastructure. PPP provides a means to improve efficiency and service delivery to users and gain access to new expertise and technology, reducing annual costs of infrastructure to the government, and freeing up the fiscal space. Recognizing these factors, the ADB country partnership strategy (CPS) 2011–2013, endorsed by the Board in July 2011, calls for PPPs to be "actively sought in all areas of operations." The CPS provides an undertaking for ADB to carry out a PPP assessment in 2011 to identify the potential for PPPs in the Cambodia Program. Consequently, a joint PPP assessment mission was fielded by ADB and Agence Française de Développement (AFD) on 22–31 August 2011 to investigate the potential for PPPs in Cambodia, to assess the level of "PPP readiness" in the country, and to identify potential measures and opportunities to expand PPP.

A PPP is a genuine partnership between the public and private sectors, in which risks are allocated between the two parties to create a risk profile whereby risks attached to economically important projects for the government have an acceptable credit profile for financiers. These partnership arrangements can be reinforced through the provision of "government support" to make projects "bankable." While the mobilization of private sector capital is often a primary motivation for governments to use PPPs, it is critical that these projects, and the associated levels of government support, are economically sustainable over the long term, and represent a least-cost solution for the government. This concept of economic efficiency is typically referred to as value for money (VFM). It is also important to ensure the government support provided to PPP projects is "affordable."

PPPs are contractual arrangements between the government and the private sector. Under these arrangements, the private sector agrees to provide infrastructure and related services in exchange for project revenues and government support. Government support will vary for each project, and can range from contingent government guarantees for limited political risks through to direct fiscal offtake obligations under build—operate—transfer (BOT) contracts. The use of PPPs has the potential to enhance Cambodia's capacity to develop infrastructure and generate VFM for the government, through the following mechanisms:

(i) improved quantity, quality, availability, and affordability of outputs through better specification of the project requirements, based on market analysis and sector plans prepared by the government;

- (ii) creation of results-based performance incentives through the tariff mechanism for the private sector supplier to deliver outputs of required standards;
- (iii) a focus on procuring outputs (rather than inputs under traditional procurement methods), which creates opportunities for innovation in design; better use of technology, skills, resources, and staff; and ability to unlock additional third-party revenue streams;
- (iv) incentives to minimize whole-of-life costs by requiring the private sector supplier under the competitively contracted payment mechanism to ensure availability of funds and resources when required to conduct maintenance and refurbishment at the optimal time to minimize costs;
- (v) opportunities to introduce flexibility into the project design and the contract structure to ensure capacity matches growth in demand over time, and investment occurs when required under competitive terms defined in the contract:
- (vi) competition through the tendering process on a whole-of-life basis, which helps ensure costs are minimized and provides an important benchmark for economic regulation (if required);
- (vii) better allocation of risks by partnering with the parties best positioned to manage the risks, and improved access to a wide range of risk instruments such as insurance and swaps;
- (viii) enhanced access to private finance, which will help speed up infrastructure development;
- (ix) streamlined, transparent, and efficient project implementation, monitoring, and management arrangements; and
- (x) regular reviews and fine-tuning of project structures and management processes by the government in line with lessons learned.

The use of PPPs can improve service delivery and increase availability to the government of resources for infrastructure development due to the need to transparently resolve project constraints prior to financing, and incentives placed on the private sector contractor to accurately meet users' requirements on competitive terms. These benefits are captured through the PPP contract whereby payment to the private sector contractor for outputs provided only occurs when services of the required standards are delivered. The output payments provide suppliers with explicit incentives to deliver the required outputs and services for the full term of the contract and minimize costs by making adequate provisions to maintain assets and minimize costs over the life of the contract. Once the PPP project preparation, structuring, and management arrangements have been developed and successfully implemented, the models can then be replicated and scaled up to meet unmet infrastructure demand in line with sector development plans. PPPs have the potential to provide the government with the capacity to reliably tap into large private sector financial resources from national and foreign sources on a competitive basis.

The government has recognized the importance of PPPs, and a Law on Concessions (LOC) was enacted by the National Assembly in 2007. A draft sub-decree that would allow the LOC to be implemented has been prepared, but it has not been approved. Despite the absence of a legal framework, as of December 2012, a significant number of PPPs had been implemented, or were in the process of being implemented in Cambodia, and further PPP projects are planned in the power sector. While the number of PPPs

implemented in Cambodia is impressive, the overall level of private investment outside the power sector in areas such as water and transport is low. The PPP projects being proposed are often quite small and emerge on an ad hoc basis. PPPs are not standardized, and they tend to be issued on a reactive, unsolicited, and negotiated basis, rather than through proactive government preparation and competitive tendering. As a result, the amount of funds being raised through PPPs is below potential, and it is unlikely the services provided accurately reflect market needs. There is virtually no PPP investment in social sectors such as health and education, and the government currently lacks a credible PPP project pipeline.

Despite comprehensive sector development plans, implementation appears to be unbalanced and PPPs would provide opportunities to address this issue. Most of the infrastructure investment has been focused in the urban areas, which only comprise 20% of the estimated population of 14 million. While most economic growth is occurring in the cities, the majority of the population of Cambodia lives in the rural areas, relies on agriculture, and is dependent on the transport and power sector networks. With the accession of Cambodia to the World Trade Organization (WTO), and rapid growth in areas such as rice production for export, there is a need for the government to develop an infrastructure program that meets the needs of both the rural areas and the urban centers. This program should reflect the requirements of the country's supply chains for various products such as rice and garments; coordinate infrastructure development of road, rail, and ports; and ensure availability of low-cost and reliable power and water.

There are a range of constraints to the development of PPPs. One of the most common problems for PPPs in many countries is land acquisition, although it has not been an issue in Cambodia to date. Nevertheless, there appear to be problems arising in regard to the resettlement programs that are being applied to infrastructure projects, and there are concerns about the political sustainability of these initiatives. There are weaknesses in the legal environment, and the government has been taking steps to address this issue. A National Arbitration Center was only established in 2011, so its effectiveness has yet to be tested. The arbitration law is modeled on the United Nations Commission on International Trade Law (UNCITRAL), and commercial disputes involving foreign investors can be heard in Singapore and Hong Kong, China. The weakness of domestic arbitration arrangements acts as a constraint on foreign investment, and it is not clear whether a local court would automatically enforce an international arbitral award, or retry the matter on its own merits.

The governance environment has constrained the development of transparent and effective PPPs, and a clear policy, legal, and regulatory framework, and the development of institutional capacity within government agencies would help address this constraint. The LOC provides an overview of how PPP concessions can be granted in a competitive and transparent manner, but there is no approved policy framework to guide preparation and implementation. The LOC does not address the institutional and capacity issues required for the government to identify, prepare, transact, monitor, and evaluate the contracts, and take appropriate management actions when required. The approval of the draft sub-decree could address some of these issues, but it is largely silent about how PPPs will be developed and financed within the government at the institutional level. There is a lack of detail on how issues will be addressed in areas such as the need for adequate project preparation of feasible projects, the method of evaluating alternative designs to maximize potential for VFM and ensure bankability, the way in which solicited and unsolicited projects will be tendered and evaluated,

and how contracts will be managed. There is no discussion in the draft sub-decree on issues such as risk allocation, use of standard contracts, or procedures to be followed to introduce a contract variation, or manage early termination. As a result, there is no systematic framework in place for the government to manage project preparation, fiscal project obligations, and associated contingent risks. Defined procedures are needed to ensure the government's interests and risks are properly managed after PPP projects commence operations.

There is a lack of clarity about the nature and form of government support that can be provided to PPP projects, and the associated risk management arrangements. Government support can catalyze investment by leveraging the availability of private capital, but fiscal offtake obligations and guarantees need to be carefully managed, as they can create large direct and contingent risks for the government. To date, most PPP projects have been procured on a noncompetitive and unsolicited basis. Some of these projects are quite large, particularly in the power sector, and the International Monetary Fund (IMF) noted in a recent report on Cambodia's debt sustainability that the hydropower projects presently being developed by the government as PPPs have the potential to create significant liabilities for the government.

A successful PPP program requires a well-established preparation, transaction, and management process for PPP projects, and a government support and risk management institutional framework that is fully integrated to ensure the PPP program is sustainable. The most important institutions are a national PPP task force to lead and coordinate project development, a PPP unit, and a risk management unit (RMU) that can provide centralized sources of expertise and advice to government agencies. The PPP unit provides expertise governing the design, implementation, and management of PPP projects. The RMU provides advice on the levels of government support that are sufficient to make a project bankable, and are affordable. The RMU then manages the associated risks and funding obligations on a portfolio basis. The RMU helps ensure that the full liability profile of the government is known and understood and that national borrowing is optimized and sustainable. These government support and risk management arrangements will become increasingly important as the size of the PPP portfolio grows and the government seeks to develop PPP projects in social sectors such as health and education.

To be effective, these PPP institutions need to be adequately resourced and funded. At present, government agencies do not have access to expertise and funds to proactively prepare, tender, and manage PPP projects, so they are reliant on the private sector to perform many of these functions on an unsolicited and noncompetitive basis. The availability of international experts and funding for project development through a project development facility (PDF) would allow government agencies to gain control of the PPP development process and take a proactive approach in the development of infrastructure, and transparently evaluate solutions offered by a range of alternative providers. An infrastructure guarantee facility (IGF) can complement the RMU operations by utilizing guarantees from other international financial institutions to enhance the credit enhancement capabilities of the government for PPP projects.

The government may also require funding to address issues such as the financing of the up-front costs of land acquisition and resettlement. These land-related costs can potentially be financed through the establishment of a land acquisition fund (LAF), and the costs recovered by the government from PPP contractors who, in turn, can pass

these costs on to end users through the tariff mechanism. The government can establish a viability gap fund (VGF) to cover the costs of projects that have strong economic benefits, but the tariff charged to users does not reflect the full financial costs. A VGF will provide a source of funds to cover the difference between economic and financial benefits. VGFs can be an important enabling mechanism in sectors such as water where it takes time for tariffs to move to full cost recovery, and roads and urban transport infrastructure where reductions in traffic congestion can justify end-user tariffs set at levels below cost. The government may also want to consider the establishment of a long-term infrastructure financing facility (IFF) that can provide long-term finance to private sector infrastructure investors.

The requirements for establishing a full PPP program can be significant, and it will take time to develop all of the necessary institutions and financial arrangements for an effective program. It is important that the government recognizes that PPPs are not a universal solution for its infrastructure requirements; they can be relatively inflexible and are best suited for hard infrastructure where assets have a long life of 15 to 50 years. With these two caveats in mind, PPPs can play an important role in mobilizing private sector capital to assist the government in meeting its infrastructure requirements, and they have the potential to provide spillover benefits for other areas of public sector operations. PPPs require high standards of project preparation, and are based on the procurement of outputs, rather than inputs, which tend to be the focus of traditional forms of procurement for governments. Outputs can be explicitly linked to the achievement of outcomes, which are the primary area of interest for governments. As a result, PPP frameworks can help provide the government with tools that can be used to monitor and evaluate a wide range of projects, irrespective of the method of procurement.

Potential Areas of Assistance

It is recommended that the government implement a phased PPP development program that builds on project successes to create political support and investor confidence. Often, countries that embark on a PPP program are tempted to select projects that are too ambitious and take shortcuts in an attempt to accelerate the development of the PPP program and achieve quick results. These actions can lead to costly project failures and delays for the government, and can be avoided through up-front planning, institutional capacity building, and appropriate project preparation and management.

As a first step, the government can review and formulate a policy framework to support private sector participation in infrastructure sectors, review the LOC and determine the extent to which the legislation needs to be broadened in scope, and/or made more specific to support the use of PPPs. It is important to ensure that laws and regulations do not conflict with other existing legislation. The government should consider the roles and responsibilities of its various agencies. At present, the LOC is largely silent about the roles and responsibilities of the Ministry of Economy and Finance (MEF), and prospective government contracting agencies (GCAs). Critical issues that need to be considered include the demarcation of responsibilities between the Council for the Development of Cambodia (CDC) and the MEF. Within the MEF, the possibility should be considered of establishing a PPP unit to oversee project preparation and implementation by acting in a coordination and quality control role. Similarly, the MEF

could consider the possibility of establishing an RMU that can define acceptable levels of government support which can be provided to projects, and systematically manage the associated direct and contingent risks on a portfolio basis. The government can also review procurement arrangements, and assess areas where contract management and arbitration mechanisms need to be strengthened.

As a second step, the government needs to ensure that institutions have access to sufficient resources to perform their assigned roles and responsibilities. Initially, the government could establish a PDF, which can play a crucial role to kick-start Cambodia's PPP program. A PDF and its associated management team is a proactive institutional arrangement that can be used to develop institutional capacity and provide financing to selected GCAs and projects. This assistance can be used to facilitate project evaluation, development, and procurement as PPPs. Such a PDF can focus on a small number of medium-sized "pathfinder" projects, in sectors such as transport that have a demonstrated international track record of success, and in which the demands on the government in terms of project preparation skills, government support, contract preparation, and risk management are not too challenging. Once the institutions, project preparation processes, and contractual structures are operating effectively, the government can then consider scaling up PPP operations in more complex sectors such as health that tend to require greater levels of technical expertise and government support.

With a renewed commitment by the government to ramp up PPP efforts and strong and committed PPP champions at the CDC and the MEF, there appears to be a good opportunity for increased PPP engagement by ADB and AFD. Sectors of primary interest would include power, transport (toll roads, seaports and river ports, and domestic airports), and water. PPP opportunities for education and/or health appear to be limited at this stage, although the higher education subsector may provide opportunities in the future. Next steps for ADB and/or AFD include the following:

- (i) Technical assistance. ADB could provide the MEF with technical assistance (TA) to the value of \$225,000, to review existing policies, laws, regulations, and institutions. As part of this analysis, it would be important to clearly differentiate between the "front office" role of the CDC, which has overall responsibility for the strategic direction and coordination of the PPP program in areas such as licenses, and the "back office" operational responsibilities that need to be performed by the MEF and the prospective GCAs. The institutional arrangements for a PPP task force, PPP unit, and an RMU will need to be defined. A component of the TA project could include a review of the institutional arrangements and the associated funding requirements for a PDF and an RMU. As part of this program, assistance could potentially be provided to help develop an independent infrastructure arbitration unit within Cambodia.
- (ii) Loan for a project development facility. ADB and/or AFD can consider providing TA and/or a loan for the establishment and operation of a PDF. A PDF is seen as a key mechanism for catalyzing the implementation of PPPs,

This initiative is in line with ADB's Country Partnership Strategy, 2011–2013, which states: "Where appropriate, technical assistance will support and facilitate project development, address entry barriers, improve governance, and develop capacity." The concept paper for the small-scale policy and advisory technical assistance (S-PATA) has been approved by ADB Management. In addition, a provision has been made for technical assistance of \$800,000 in 2012, a \$2.5 million project design facility in 2012, and an Asian Development Fund loan of \$25 million in 2016. These amounts could be adjusted, subject to resource availability.

- and provides government agencies involved in PPPs with a mechanism for "learning by doing." The experience gained from implementing pathfinder projects can then be used to help refine the provisions in the sub-decree for the implementation of the LOC and, if necessary, identify areas of reform that might be beneficial to strengthen the law itself. Once established, the PDF can potentially be financed by multiple donor agencies.
- (iii) Assistance to develop an infrastructure guarantee facility. ADB and/or AFD could provide the government with assistance to develop an infrastructure guarantee facility (IGF) to administer the provision of government support and the associated PPP risk management framework. An IGF is an institution linked to the MEF through which private sector advisors can be recruited to help manage PPP-related risks by applying international best practices. An IGF can also be used as a mechanism to facilitate the financial participation of international financial institutions to provide credit enhancement support to PPP projects that complements government support mechanisms and enhances project bankability.
- (iv) Assistance to create institutions. ADB and/or AFD could provide the government with assistance through its public and private sector windows to scale up its PPP operations through the creation of a VGF, LAF, and/or IFF once the basic PPP model has been established and proven. These institutions could play a central role catalyzing private investment, particularly in sectors such as health and education, which tend to require higher levels of government support to ensure they meet the requirements of the public sector, and are bankable for the private sector.

Immediate Next Steps

It is proposed that as an initial step ADB and/or AFD prepare a "strategy paper" for the government that is based on a review of the policy framework for facilitating private sector participation in infrastructure and identifies the role of various modalities such as PPPs. This paper could elaborate on the findings and conclusions presented in this joint assessment report, and provide a road map detailing how instruments such as PPPs can be integrated into the government's planning and budgeting process, and operationalized over the medium term. It is proposed that the basic contents of this strategy, as well as the findings of this PPP assessment, will be discussed in a series of workshops with all key stakeholders during 2012.

Background

Rationale for the Public-Private Partnership Assessment

In March 2010, the Asian Development Bank (ADB) and Agence Française de Développement (AFD) concluded a new "Partnership Framework Agreement" for the period 2010–2016. The agreement aims to strengthen institutional and operational cooperation between the two organizations and provides an opportunity to explore new areas of collaboration, including sovereign, sub-sovereign, nonsovereign, and private sector financing. In this regard, public–private partnership (PPP)¹ represents an important modality for ADB–AFD sector and thematic cooperation as both institutions seek to identify opportunities for promoting and increasing PPP-related operations.

The PPP review was also carried out in accordance with the ADB country partnership strategy (CPS) 2011–2013, endorsed by the Board in July 2011, which calls for PPPs to be "actively sought in all areas of operations." The CPS provides an undertaking for ADB to carry out a PPP assessment in 2011 to identify the potential for PPPs in the Cambodia Program. The management of ADB and AFD approved a joint PPP assessment mission in Cambodia on 22–31 August 2011. The purpose of the mission was to assess the relative level of "PPP readiness" in the country and identify potential measures and opportunities to expand PPP.

Approach and Methodology

This report provides a broad overview of the PPP situation and issues in Cambodia. In carrying out the mission, the team held a series of meetings and interviews with officials from ADB, AFD, other donors, the Government of Cambodia, and the private sector (Appendix 1). In addition, the team conducted a desk review of other reports on PPP (Appendix 2). The review focused on the role of PPPs in supporting the development of infrastructure in Cambodia in sectors such as power, water, transport, health, and education.

For the purposes of this report, ADB's definition of PPP is used. A PPP includes all modalities that assume some form of partnership/contractual relationship between the public sector and private entities for a finite time with the aim of delivering infrastructure and other services through service and management contracts, build—operate—transfer (BOT) projects, and other forms of concessions. A well-designed PPP allocates the tasks, obligations, and risks among the public and private partners over the whole life of the project to maximize value for money (VFM) for the government and users.

Development Strategy Context for Public-Private Partnership in Cambodia

The government's national economic development strategy is presented in the Rectangular Strategy on Growth, Employment, Equity, and Efficiency, Phase II, which provides the development policies for the fourth legislature (2009–2013). The government launched the National Strategic Development Plan (NSDP) Update in mid-2009, with the overarching objective of reducing poverty to 19.5% by 2015. The government has made progress in this area, bringing the share of population below the poverty line down from 35.9% in 1999 to 30.1% in 2007. The NSDP Update stresses the importance of good governance, the role of private sector development and employment, the need to develop agriculture and infrastructure, capacity building and human resource development, and the establishment of a conducive enabling environment for private sector development.

The government seeks a new development paradigm to respond to changes in the global economy, to strengthen resilience to external shocks, and to achieve higher quality growth. The policy priorities of the NSDP Update intersect closely with ADB's Strategy 2020, especially in the core areas of infrastructure, education, and finance. The NSDP Update places emphasis on enhancing agriculture, which is critical to meet the Cambodia Millennium Development Goals, including gender-related goals, as 80% of the population and 90% of the poor live in rural areas. Most agriculture projects involve either rebuilding infrastructure or stimulating private sector development through agricultural commercialization and economic diversification.

ADB's current CPS for Cambodia covers the period 2011–2013. The CPS focuses on two strategic objectives: (i) inclusive economic growth, through physical infrastructure, technical and vocational education and training, agriculture and irrigation, finance sector development, regional integration, private sector development, and economic diversification; and (ii) social development and equity, through basic education, water supply and sanitation, social protection measures, and community-based development around the Tonle Sap. It is expected that PPP will become an important modality for ADB's operations in Cambodia for promoting inclusive economic growth and supporting ADB's overall Strategy 2020 goal that 50% of its operations will occur in private sector-related program areas.

The AFD Group strategy in Cambodia is directed at supporting key infrastructure investments, notably in the energy, transport, and water sectors. This approach will be confirmed in the future strategy of the AFD Group that will be prepared to cover the period 2011–2015. AFD is currently financing pre-feasibility studies to support access to electricity and water supply in rural areas. AFD is also studying the opportunity, through a PPP scheme, to finance the rehabilitation of two markets in Phnom Penh (Phsar Kandal and Phsar Chas). The amount of funding that will be necessary to cover the investment needs for infrastructure development in Cambodia in the coming years is huge. Meanwhile, AFD recognizes that, under certain conditions, PPP approaches can increase the performance and efficiency of public services and investments. As a result, AFD considers that PPP should be looked at as an opportunity for developing infrastructure financing. In this context, AFD is committed to support PPP, keeping in mind that a differentiated approach will have to be considered for each specific sector.

Enabling Environment for Public-Private Partnership

Economic Policy and the Macro-Economy

The government is transforming the country from a post-conflict to a market-oriented economy characterized by steady economic development. Economic performance has been impressive, and over the last decade Cambodia has become increasingly integrated with the Greater Mekong Subregion (GMS) and the global economy. The country's gross domestic product (GDP) growth rate of 9.8% over the decade 1998–2007 ranked it sixth in the world and the second-fastest in East Asia, after the People's Republic of China (PRC). Growth fell to 0.1% in 2009 due to the global financial crisis, but by 2012 has been recovering well. The growth rate for GDP in 2010 is estimated to be 6.3%, and the three main drivers of growth are exports of garments, tourism, and construction, which together account for nearly 40% of GDP. There has been increasing trade integration following Cambodia's accession to the World Trade Organization (WTO) in 2004. The export recovery is expected to continue through 2011 and 2012 with projected growth of 6.8% and 6.5%, respectively, although the fragility of the global recovery exposes Cambodia's relatively narrow export base, with its heavy reliance on the United States (US) and European markets, to downside risks in the near term.

Fiscal policy has been expansionary in response to the economic crisis and the budget deficit (6.0% of GDP in 2010) is expected to remain relatively high for 2011. Recent data indicates that fiscal consolidation is on track to meet the 2011 budget targets. Revenue mobilization remains key to expanding the fiscal space, while ensuring fiscal sustainability. The level of government revenue as a percentage of GDP is about 13.4%, which is low when compared to other countries in the region. Weak revenue growth, combined with forecast rises in expenditure, indicates the budget will remain in deficit. One of the economic policy challenges is containing inflation, which was forecast to increase from 4.0% in 2010 to 5.5% in 2011, creating difficulties stabilizing the exchange rate while, at the same time, promoting economic growth. The economy is largely dollarized, complicating macroeconomic management, and reducing the effectiveness of monetary policy.

In the external account, exports of merchandise grew by 20.8% in 2010, mainly due to increased garment exports to the US. Imports increased by 16.3% over the same period due primarily to increases in the cost of imported oil and in materials for garments. The current account deficit (excluding official transfers) widened to an estimated 12.3% of GDP in 2010, up from 11.6% in 2009, but was expected to edge down in 2011. Foreign direct investment (FDI) inflow increased by about 50% in 2010 and is expected to be sustained at about 5%–6% of GDP per year, mostly sourced from Asia. External debt is relatively low, at about 29% of GDP, although the government's ability to service additional debt is constrained by the shallowness of its revenue base. The PRC is the country's largest emerging bilateral creditor, accounting for about 58% of total bilateral disbursements in 2010.

The exchange rate has been fairly stable, but Cambodia is exposed to the global financial and economic crisis through its dependence on garment exports, tourist arrivals, and foreign funding for large construction projects. The strong inward flow of dollars related to garment exports, tourism receipts, FDI, and official development assistance (ODA), will benefit the dollar-based urban economy. The National Bank of

Cambodia (NBC) intervenes from time to time to keep the exchange rate within a target range. Since the NBC maintains a fairly stable exchange rate, and the economy is highly dollarized, a depreciation of the US dollar is not expected to have any immediate effect on Cambodia's exports.

Cambodia's financial system is relatively shallow. Bank credit to the private sector is moderate at about 28% of GDP. Over 95% of banking system deposits are denominated in US dollars. While many new banks have been licensed in recent years, the system is dominated by five large banks (two of which are foreign owned), which account for nearly 80% of credit. Rural areas are primarily served by microfinance institutions, representing less than 10% of financial system assets. While the banking system emerged apparently intact from the financial crisis, significant risks to stability remain. It is likely that the sharply slowing economy and collapse of the real estate market in 2009 weakened banks' balance sheets, and there are concerns that the level of nonperforming loans in the financial system is understated.

Business Climate

Overall, the economy and the business climate have many positive aspects, and Cambodia is solidifying the business foundations built following the liberalization of the economy in the mid-1990s. Cambodia's future growth will be supported by fundamental factors such as an advantageous location in Asia between the PRC and India and within the GMS and the Association of Southeast Asian Nations; a favorable investment climate for foreigners who can own 100% of most businesses, repatriate profits, and hold land leases of up to 99 years; stable monetary policy and fiscal stability based on a largely dollarized economy; increasing trade integration; a low-cost workforce; improving transport connectivity with its neighbors; a rapidly growing consumer base; and substantial underutilized resources in the agriculture sector and in the oil sector where the government is expecting first production in late 2012.

Reflecting these economic policies and advantages, most growth in the economy has been occurring in the private sector, with the government taking a supportive role. While the formal economy has been growing, the bulk of the private sector continues to operate informally, and the rate of diversification has been slow. Most activities occur in areas that do not require capital-intensive investment, resulting in quite low productivity in some sectors, when compared to neighboring countries. The Cambodian private sector has strong international linkages through trade and investment. Special economic zones are attracting investments in light industry, especially those located in Phnom Penh, Sihanoukville, and Svay Rieng. While the business climate has improved, more needs to be done to attract investment and generate jobs for an expanding labor force.

The impact of the global recession on the economy has highlighted the need for Cambodia to reduce vulnerability to external shocks by accelerating economic diversification and improving competitiveness of industries. Cambodia's exposure to volatile western markets, and the recent downgrading of the US sovereign credit rating and sovereign debt concerns in the eurozone has meant it is unlikely that the economy will return in the short to medium term to the high growth rates of about 10% per year that were achieved prior to the financial crisis. The government needs to address issues such as growing industrialization and increasingly rapid urbanization. At present,

about 80% of the population lives in rural areas, and 70% of the workforce is engaged in agriculture, which only accounts for 30% of GDP. Over time, the rate of urban drift and associated industrialization as well as the level of manufacturing are expected to increase.

The government recognizes that the key to sustaining high economic growth and poverty reduction is improvements in competitiveness, combined with diversification of the sources of growth from its current narrow base in construction, garment exports, agriculture, and tourism. To support this process, further reforms are required at all levels of the supply chain. The clothing and tourism industries are hampered by high costs for electricity, and this will continue until Cambodia builds its generation, transmission, and distribution capacities. There is potential to address trade restrictions, which involve numerous bureaucratic procedures and unofficial fees. These industries need to raise the quality of their products and services and develop skills and facilities to support higher value-added activities.

Following WTO accession, cooperation is increasing with neighboring countries, enabling Cambodia to tap into growing markets through increased connectivity. The country lies at the heart of the GMS southern economic corridor extending from Thailand to Viet Nam through highway and railway links that form part of the Singapore–Kunming rail project. To meet competition in these markets and strengthen value chains in agriculture, manufacturing, and tourism, Cambodia needs to intensify efforts to reduce transport and logistics costs, especially at ports and border crossings. As shown in Table 1, much work is required to realize this potential, as the country does not score highly against other countries in the region in terms of the ease of doing business.

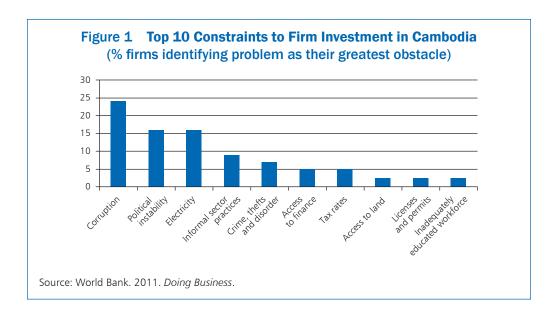
Table 1 The Ease of Doing Business in Cambodia Compared to Other Countries in Southeast Asia

Country	Global Ranking
Singapore	1
Thailand	19
Malaysia	21
Indonesia	121
Cambodia	147
Philippines	148
Lao PDR	171
Timor-Leste	174

Lao PDR = Lao People's Democratic Republic. Source: World Bank. 2011. *Doing Business*.

In a similar study conducted by the World Economic Forum, *The Global Competitiveness Report 2011–2012*, Cambodia's ranking rose 12 places to 97th out of 142 countries. Despite these improvements, weaknesses in the business climate continue to be a significant problem. A growth diagnostic carried out by the World Bank in 2008 and updated in 2010 indicated there are a range of opportunities to strengthen the

economy by alleviating constraints.² The most important constraints identified in the reports were (i) poor service by the finance sector for agriculture, agribusiness, and small and medium-sized enterprises; (ii) coordination issues along value chains and between various economic participants; (iii) appropriation concerns relating to corruption and various types of uncertainty; (iv) costs of electricity, logistics services, and labor, as well as the level of the real effective exchange rate; and (v) weak labor force skills. These findings are reflected in the World Bank's Doing Business survey for 2011, and presented in Figure 1.



Corruption and political instability were cited by the private sector as the most important business climate constraints in Cambodia. Political stability has been improving in recent years, but it will take time to address issues related to corruption. The government fully recognizes that governance and corruption are key constraints for the economy and places better governance as a top policy priority in the Rectangular Strategy, Phase II and the NSDP Update. In 2010, the government adopted an anticorruption law which, if well implemented, could improve public sector governance, significantly reduce the costs of doing business, and strengthen the country's competitiveness.

Quality and Availability of Infrastructure

The lack of infrastructure, particularly in regard to electricity, is cited by the private sector as a critical constraint. The infrastructure services that presently exist in Cambodia are mainly concentrated in urban areas, which account for only 20% of households. Coverage and access to infrastructure services in Cambodia are low compared with its neighbors, and with countries of similar income levels; this is having a negative impact on economic growth and the development of new sectors (Table 2).

World Bank. 2009. Sustaining Rapid Growth in a Challenging Environment: Cambodia Country Economic Memorandum. Washington, DC. These findings were confirmed in a broader context in a recent ADB-financed study: X. Yang et al. 2010. Factors Affecting Firm Level Investment and Performance in Border Economic Zones between the People's Republic of China and its Neighboring GMS Countries. Journal of Greater Mekong Subregion Development Studies. 1 (1).

Indicators	Cambodia	East Asia and Pacific Average	Low income Countries	OECD Average
GNI per capita, Atlas method (current \$)	480	2,111	471	33,470
Access to electricity (% of population)	16	63	26	
Electric power consumption (kWh per capita)		1,230	642	8,769
Improved water source (% of population with access)	41	75	63	99
Improved sanitation facilities (% of population with access)	17	60	38	
Total telephone subscribers per 100 inhabitants	8	28	9	

GNI = gross national income, kWh = kilowatt-hours, OECD = Organisation for Economic Co-operation and Development.

Source: World Bank. Private Participation in Infrastructure Projects Database.

Constraints in the transport sector also need to be addressed. A cross-country study conducted by the World Bank suggests that high logistics costs and, more importantly, low levels of services, are barriers to trade and growth.³ The report presented data indicating that Cambodia is less efficient than most countries in the region. These findings were based on a comprehensive survey of supply chain performance indicators, including customs procedures, logistics costs, infrastructure quality, timeliness of reaching destination, and the competence of the domestic logistics industry.

In part, these problems result from lack of coordination of infrastructure development. Most infrastructure investment has been focused in the urban areas, which only comprise 20% of the estimated 14 million population of Cambodia. While most economic growth is occurring in the cities, the majority of the population of Cambodia lives in rural areas, relies on agriculture, and is dependent upon the transport and power sector networks. Accordingly, the government needs to develop an infrastructure program that meets the needs of both the rural areas and the urban centers. This program should ensure availability of low-cost and reliable power and water.

The government has recognized these issues and developed comprehensive sector development plans for infrastructure. These plans are coordinated under the overarching development program defined in the Rectangular Strategy and the NSDP Update. The total investment for infrastructure in Cambodia is estimated to be in the range of \$12 billion—\$16 billion from 2013 to 2022, although in practice, this figure could be much higher, given estimated investment needs in sectors such as water. Infrastructure investment is state-led, and the public sector capital investment rate as a percentage of GDP is approximately 6% per year. This figure is broadly in line with international

³ World Bank. 2007. *Connecting to Compete: Trade Logistics in the Global Economy*. Washington, DC. In addition, an ongoing ADB research exercise—the Blue Book on Transport and Trade Facilitation along the GMS Southern Economic Corridor—confirms the high cost of transport and logistics on this important corridor.

standards, although it is low compared to countries such as the PRC and Viet Nam, which are achieving levels of approximately 10% per year.

Power sector development is under the direction of the Ministry of Industry, Mines and Energy (MIME), which coordinates expansion of the system and linking it with neighboring countries in line with a power sector development plan. MIME has ambitious plans to construct transmission lines, eight hydropower plants, and three coal-fired power plants by 2020. ADB has provided assistance through its private sector window to develop a transmission line between Thailand and Cambodia. MIME also coordinates the development of the water supply in urban areas and regulation of private sector piped water systems.

The Ministry of Public Works and Transport (MPWT) is responsible for developing sector plans for major infrastructure in the transport sector and in public works in urban areas such as wastewater management, drainage, and flood control. The MPWT's responsibilities encompass 11 international airports, 5,263 kilometers (km) of national roads, 6,441 km of provincial roads, the railway, a deepwater seaport at Sihanoukville, and various river ports. The railway is being developed with ADB assistance from its public sector operations and will link Cambodia to Thailand, and rehabilitate the line from Phnom Penh to Sihanoukville. The PRC has assisted the government in preparing a feasibility study for constructing a new railway line from Phnom Penh to Viet Nam, which is currently under review for financing options. If constructed, it would complete the missing Phnom Penh–Ho Chi Minh City link in the Singapore–Kunming Railway Line. The Sihanoukville port is being assisted by the Japan International Cooperation Agency (JICA) and it will service the emerging oil industry, and provide bulk cargo and container handling services. The state-owned Phnom Penh Port has been scaling up its operations and has plans to expand, acting as a feeder port to the Cai Mep deepwater port in southern Viet Nam.

The government is in the process of delegating selected responsibilities, powers, and resources from line ministries at the central level to government agencies at local levels. As part of this process, the government has given a high priority to building the capacity of local authorities to ensure they are able to effectively address their own development needs. The NSDP Update and the Rectangular Strategy highlight the importance of the role of the private sector as the "engine for growth." The government has stated that the private sector, nongovernment organizations, and civil society will be encouraged to mobilize local resources for infrastructure development and service delivery through partnerships and participation. The government has expressed its commitment to support private investments in development of transport and telecommunications infrastructure systems, and the energy and electricity sectors (Rectangular Strategy) in its third mandate. With the commitment of the government, the private sector has already started working formally in infrastructure development providing public services in the telecom, energy, transport, water, and waste sectors. The private sector is also engaged through the informal sector in smaller-scale initiatives in the energy and water sectors.

The Role of Public-Private Partnerships in the Economy

PPPs are an important component of the government's development strategy. A draft policy paper was prepared (Appendix 2), which provided the basis for a Law on Concessions (LOC) enacted by the National Assembly in 2007. A draft sub-decree

that would allow the LOC to be implemented has been prepared, but it has not been approved by the government. Despite the absence of a legal framework, a significant number of PPPs have been, or are in the process of being, implemented in Cambodia (Table 3). Four independent power producers (IPPs) are already supplying electricity to Electricité du Cambodge (EDC) under power purchase agreements, largely to meet the power requirements of Phnom Penh. Further PPP projects are being planned in the power sector, including four power transmission BOT projects, three coal-fired power BOT projects, and nine hydropower BOT projects. Numerous small rural electricity enterprise (REE) concessions have been awarded to integrated electricity suppliers. The government has developed airports, toll highways, and the railway using various forms of PPP. In the water sector, a bulk water concession and 16 small rural distribution concessions have been awarded to the private sector. In the solid waste management sector, a private company is responsible for managing the solid waste in Phnom Penh for a period of 50 years. The municipalities in Battambang and Siem Reap have also outsourced solid waste management services to the private sector.

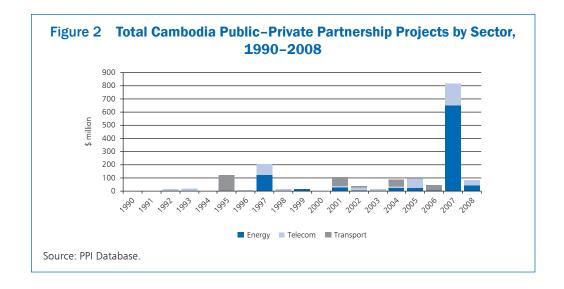
Table 3 Public-Private Partnerships Implemented by the Government of Cambodia

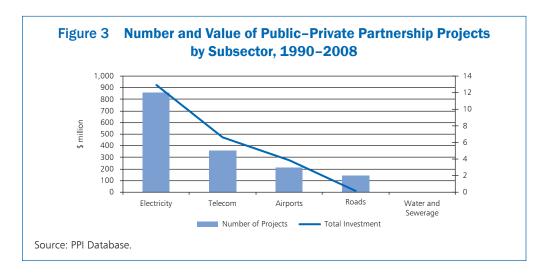
Sector	Number and Form of PPP	Level of Government Issuing Contract
Power	6 hydropower generation BOT projects 3 coal-powered generation BOT projects 2 transmission leases/BOT projects Various licenses issued to small REEs for generation and distribution	National National National Subnational
Airports	3 airport concessions Air navigation services concession	National National
Roads	National Route 4, concession Various rural concessions	National Subnational
Rail	Operation and maintenance contract	National
Seaports	Oil terminal and dry port concession	National
Water	16 small rural distribution concessions 1 bulk water project	Subnational Subnational
Solid Waste Management	2 concessions	Subnational

BOT = build-operate-transfer, REE = rural electricity enterprise, PPP = public-private partnership. Source: ADB.

While the number of PPPs is impressive, the overall level of private investment outside power in sectors such as water and transport is low. Data from the World Bank's Private Participation in Infrastructure (PPI) Projects Database (Figure 2) show that during the period 1990–2008 there was a total of 22 PPP projects in Cambodia. Slightly over half of these projects were in the energy sector, representing about 55% of total investments by number and investment value.

While private investment in infrastructure has been increasing in recent years, the number of projects and the amounts mobilized continue to be small (Figure 3). It appears that in the road sector there has been little investment as the concessions were allocated for existing roads.

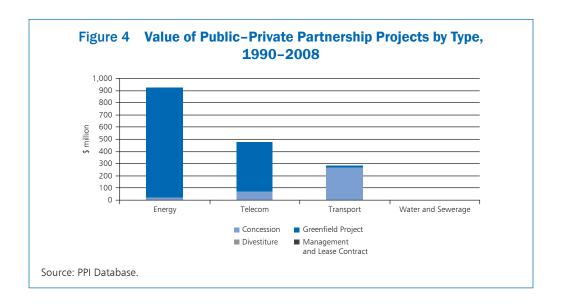




Most of this investment has occurred in the form of greenfield investments in the energy sector and concessions in the telecoms sector (Figure 4).⁴

These figures confirm that the potential of PPPs has not yet been fully realized; there have not yet been any significant PPP projects in the social sectors such as health and education, and the overall level of private investment in infrastructure remains low. The PPP projects being proposed are often quite small and emerge on an ad hoc basis. PPPs are not standardized, and they tend to be issued on a reactive, unsolicited, and negotiated basis, rather than through proactive government preparation and competitive

In broad terms, greenfield projects are defined in the PPI database as projects in which the government has some involvement in the offtake arrangements for new investments in infrastructure. These types of PPP projects contrast with concessions, where all the revenue is derived from the private sector.



tendering. As a result, it is unlikely the services provided accurately reflect market needs, and the amount of funds being raised through PPPs is below potential.

ADB and AFD Public-Private Partnership-Related Activities in Cambodia to Date

ADB and AFD PPP-related activities to date have been limited. ADB has helped finance the Cambodia Power Transmission Line (CPTL), which is a 221 km, 115-kilovolt (kV) transmission line from Thailand to the Northwest region, developed as a BOT agreement between EDC and privately owned CPTL. ADB, in association with various other international financial institutions, has assisted the government in restructuring and rehabilitating the Cambodia Railways by partially upgrading the 650 km railway line that connects Poipet, Phnom Penh, and Sihanoukville. As part of this program, Toll Royal Cambodian Railways is operating and maintaining the railway on a commercial basis under a 30-year concession agreement with the government. AFD recently provided technical assistance under the Phnom Penh Plan to develop capacity to prepare PPP projects. Considering the limited number of PPP transactions to date, and the emerging interest placed by the government on infrastructure development using private sector financing, there are clearly significant opportunities for ADB and AFD to scale up assistance in this area.

Rationale, Options, Preparation Requirements, Global Experience, and Lessons Learned for Public-Private Partnerships

In considering the scope for increased PPP opportunities in Cambodia, it is useful to briefly identify why they are important; define the various forms of PPP; demonstrate

how they are prepared; and summarize global PPP experience, lessons learned, and best practices.

Why Are Public-Private Partnerships Important?

PPPs provide governments with the ability to develop infrastructure by tapping into private sector resources in both local and international markets. At the macro level, infrastructure investment is closely connected with integration in the global economy, competitiveness, and economic growth. At the micro level, access to infrastructure provides households with the opportunity to escape from poverty through mechanisms such as providing access to markets, reducing time spent on securing safe water supplies, reducing the cost of energy, and more generally increasing productivity.

The government has recognized the importance of infrastructure, but it does not have sufficient technical and financial resources to meet these requirements by itself. The government needs to consider measures to mobilize additional resources and funds. In these circumstances, countries have three principal options:

- (i) review the traditional sources of funds such as ODA and explore opportunities to access additional amounts;
- (ii) investigate mechanisms for accessing more resources from off-budget sources such as user fees and tax revenues; and/or
- (iii) consider a greater role for PPPs as a way to procure infrastructure and identify and address the impediments to the development of PPP transactions.

To date, the government has not sought less concessional sources of ODA such as funds from the International Bank for Reconstruction and Development (IBRD) and ADB's ordinary capital resources to meet its large infrastructure investment needs due to concerns about borrowing capacity. The situation is compounded by difficulties mobilizing additional tax revenues and user fees. PPPs can help the government meet this financing gap by stimulating private sector investment in infrastructure. Involvement of the private sector in infrastructure holds the potential to both improve access to funding to speed up development of infrastructure, and increase operating efficiency, which will reduce costs to the government and free up fiscal space. The following points provide a summary of some of the key benefits for the government of involving the private sector to deliver infrastructure under PPP arrangements:

(i) Improved service quality, availability, lower cost, and greater certainty of supply. PPPs require high standards of project preparation, and they are based on detailed market assessments, and the procurement of outputs, rather than inputs, which tend to be the focus of traditional forms of procurement for governments. Outputs can be explicitly linked to the achievement of outcomes, which are the primary area of interest for governments. PPPs can tap into international resources without being dependent on availability of public sector finance, which has the potential to speed up procurement and availability to users. Where projects are competitively tendered, there is greater certainty that costs will be minimized, and the contract tariff mechanism can lock in these benefits for the life of the contract. An important feature of PPPs is the requirement that the private contractor is only paid if outputs are produced in accordance with the contract, and this creates powerful incentives for the contractor to meet its obligations.

- (ii) **Efficient use of the resources**. A well-structured PPP contract has the potential to improve efficiency through the following mechanisms:
 - (a) The private sector partner has an incentive through the competitive bid price and payment mechanism to deliver projects on time and within budget. International studies have confirmed that the cost savings arising from PPPs during the construction period can be in the range of 20%–30%.⁵
 - (b) Private contractors must consider the long-term implications of the costs of design and construction quality versus the costs of ongoing maintenance and life cycle capital expenditures, and seek to minimize whole-of-life costs (WLCs). These benefits can be significant, as maintenance and refurbishment costs can account for 60%–70% of WLCs, and if they are not properly managed can lead to large increases in total project costs. PPP contracts can guarantee asset maintenance actions are undertaken when required in accordance with expected demand and the needs of the facilities, rather than relying upon availability of public sector funds through the fiscal management system. Fiscal management systems in countries such as Cambodia are based on cash management rather than accrual accounting arrangements, and cannot adequately provision for long-term maintenance at the time the project is committed.
 - (c) Private sector bidders are required to optimize the mix of capital and maintenance costs to achieve the lowest WLCs. In comparison, under a traditional method of procurement based on the competitive tendering of construction, the private sector bidder is forced to minimize the capital cost, at the expense of greater maintenance and refurbishment costs that occur during the operating period, thereby inflating WLCs.
 - (d) Private sector contractors can be incentivized to identify new sources of third-party revenue, to help reduce total project costs. For example, it might be possible for a contractor to generate revenues from unutilized capacity by leasing the project facilities outside the operating hours defined in the PPP contract, and these revenues can be used to reduce total unit costs to users and/or the government.
 - (e) Private sector contractors can be incentivized to introduce flexibility into the project design so that capacity is developed in line with growth in demand, and thereby minimize requirements to charge users for excess capacity.
 - (f) The allocation of risks between the private and public sectors is optimized to reduce output costs to users and the government. The private sector can make use of risk management instruments such as swaps and insurance products that are not available to government contracting agencies (GCA).
 - (g) Enhanced access to lower-cost, long-term capital in both local and international markets due to the reduction and optimization of project risks.
 - (h) Improved access to finance can speed up development of infrastructure in line with market demand.
 - (i) Improved access to finance offers opportunities to realize efficiency gains through economies of scale and scope.

⁵ B. Flyvbjerg, N. Bruzelius, and W. Rothengatter. 2003. *Megaprojects and Risk: An Anatomy of Ambition*. Cambridge, UK: Cambridge University Press.

- (iii) Improved project preparation. Outputs need to be properly specified, and project risks effectively mitigated prior to taking a project to the market to attract private sector finance. Because PPP projects are funded by lenders and equity investors, these projects are subject to scrutiny by parties that are external to the government. As there is a significant amount of capital at risk, these external parties normally undertake a much greater level of due diligence and quality assurance than the standard public procurement process as the prospective GCA prepares its projects and engages with the market.
- (iv) Improved public sector procurement. By procuring infrastructure projects using PPPs, governments are able to strengthen their overall public sector procurement process and project management capacity. By successfully structuring and delivering PPPs, governments can improve their strategic planning process, project management, and negotiating capacities; introduce financial discipline; and develop capability to administer long-term contracts. PPP frameworks can also provide tools that can be used to monitor and evaluate a wide range of projects, irrespective of the method of financing.
- (v) Improved public sector management. PPPs provide the government with a high degree of control, as private sector contractors will only be paid if they deliver the required outputs in accordance with the contract. PPPs can also make governments think and behave in new ways that require new skills. They can be used as a tool for reforming procurement and public service delivery and are not just a means of leveraging private sector resources. PPPs are more than a one-off financial transaction with the private sector. As a consequence, they need to be based on firm policy foundations, a long-term political commitment, and a sound and predictable legal and regulatory environment. Private sector partners will look for these factors when deciding whether or not to participate in a project.

What Are Public-Private Partnerships?

A PPP contract can be used by a government as an alternative means of **procuring infrastructure** through the public sector. The decision to use a PPP can be equated with a choice by the government of whether it should "make or buy" the infrastructure facilities and services. A PPP refers to a contractual arrangement for a finite period between public (national, state or provincial, or local) and private entities through which the skills, assets, and/or financial resources of each of the public and private sector parties are allocated in a complementary manner, thereby sharing the risks and rewards. A well-designed PPP allocates the obligations, rights, and risks among the public and private partners over the life of the project to maximize value for money (VFM) for the government and users. An important feature of PPP contracts is that they are based on the procurement of outputs rather than inputs (which is the traditional form of public sector procurement), and VFM refers to the least-cost solution to users of the required outputs of a given level of quantity, quality, and availability, produced by the project.

Typically, the infrastructure projects covered by PPP contracts are characterized by the need for large "up-front" capital investments in long-lived assets that demonstrate **sunk costs**, as the assets cannot be reallocated to an alternative use once the investment occurs. In many cases, these projects have the characteristics of a "natural monopoly" which needs to be regulated by the government. These sunk costs will act as a disincentive for the private sector to invest as they cannot exit from the project by divesting the

assets to a third party if there are difficulties with the project. Monopoly risks act as an incentive for the government to retain a high degree of control of the facilities. A PPP contract can be used as a mechanism that will protect private investors and financiers and allow them to recover their investment, while ensuring public services are provided at fair and reasonable prices. In many cases, the government will regulate the tariff and guarantee the revenue streams through the PPP agreement, and it may also take ownership of the assets at the end of the contract period.

All PPP projects represent a partnership between the private and public sectors in the delivery of infrastructure services, although the degree and nature of public sector involvement will vary from project to project. PPPs are output focused and can cover both investment and associated operation and maintenance costs. The main forms of PPPs are as follows:

- (i) licenses, which authorize private companies to provide designated services;
- (ii) concessions, which provide control of designated resources and the private sector derives revenues from third parties under user fees;
- (iii) build—operate—transfer (BOT) agreements under which the private sector contractor gains control of public sector resources, produces defined outputs, and receives fixed annual payments from the government under availability payments;
- (iv) build–own–operate (BOO) agreements under which the private sector contractor produces defined outputs using its own resources and receives fixed annual payments from the government under availability payments; and
- (v) service contracts, which require private sector contractors to provide outputs to design, construct, operate, and/or maintain facilities.

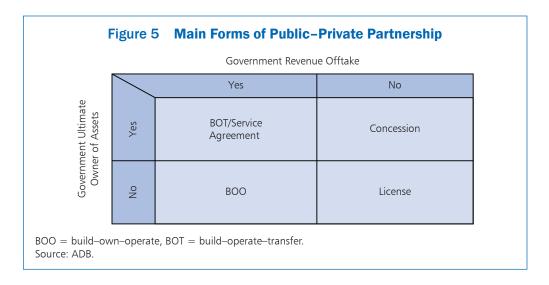
The output (revenue) and investment characteristics of the main forms of PPP agreements are shown in Figure 5.

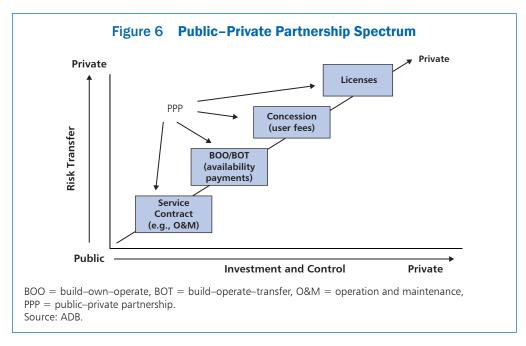
Licenses are a special case of PPP as they do not involve any revenue support or investment on the part of the government, but can be used to define the output standards provided by the private sector. Under a concession, all of the revenue risk is assumed by the private sector and sourced from third parties through user fees, but the government takes ownership of the assets at the end of the contract. Under a BOT agreement, the government takes 100% of the revenue risk under an availability payment and assumes ownership at the end of the contract period. Under a BOO agreement, the government takes 100% of the revenue risk under an availability payment, but does not take ownership of the assets at the end of the contract period. A service agreement obtains revenue from the government, but does not require investment on the part of the private sector.

The preferred PPP structure from the government's perspective is based on analysis of the extent to which private sector participation can generate VFM by stimulating private investment, versus the level of government support and associated risks that must be assumed by the government to encourage private sector investment. Figure 6 provides a

⁶ It is possible to have procurement contracts based on inputs such as franchises or leases, and they are not strictly regarded as PPPs, although these instruments can form part of an overall PPP structure.

Oncessions can be used as a general term to describe PPPs, or a specific term to describe PPPs where revenue is sourced from third party users rather than the government.





graphical representation of the major types of PPP as a subset of broader private sector participation and associated risks for the public and private sector parties.

Licenses do not require any public sector investment for infrastructure projects and do not entail any risks for the government. Because licenses in isolation do not attract private sector investment, they are often used by the government in tandem with other forms of PPP to provide a means of regulation that complements the provisions in a PPP contract. At the other end of the PPP spectrum, service contracts do not attract any investment from the private sector, and the government retains almost 100% of the project risks. Service contracts can be used in circumstances where new investment from the private sector is not required, but the government wants to improve service output delivery using performance-based contracts.

Concessions, BOT agreements, and BOO agreements fall between licenses and service agreements, and they are designed to attract new investment from the private sector by sharing project risks with the government. PPPs are typically financed on the basis of the strength of the cash flows derived from the project revenue streams. This "project financing" approach is adopted as the sunk costs associated with the assets preclude the use of "corporate finance" models where assets are used to "collateralize" the investments and loans to reduce risks for financiers by providing an exit mechanism in the form of asset sales if the project experiences difficulties. PPPs are attractive to governments as they provide a mechanism whereby the private sector is incentivized under competitive bidding conditions through the contractual arrangement to finance the construction and/or rehabilitation of facilities and deliver outputs and services for the term of the contract on a least-cost basis.

Concessions are the most straightforward PPP arrangement for the government to encourage private sector investment, as they do not require the assumption of any risks by the public sector to underwrite the project financing arrangements, as revenues are sourced from third parties through "user fees." Concessions are responsive to user needs, but this comes at the cost of loss of control on the part of the government, and increased risk to private sector financiers, which will impact on the cost and availability of private capital. BOT and BOO agreements rely on project revenues paid by the government to the private contractor in the form of "availability payments," and they impose long-term obligations on the government to meet financial commitments. Availability payments are attractive to the private sector as government-quaranteed payments can be used to secure private sector financing and improve the "bankability" of a project, but they will be less responsive to changes in user demand, and they involve additional risks for the government that need to be managed. Offsetting this result, availability payments provide the government with a high degree of control over available capacity. In some cases, it is possible for the government to use hybrid PPP arrangements under which revenue streams comprise a combination of third-party revenues based on user fees (concession), and availability payments (BOT or BOO) based on minimum revenue undertakings by the government. Hybrid structures provide a means for the private sector contractor to be responsive to user requirements, improve bankability for financiers, improve government control, and optimize the government's risk exposure.

In addition to determining the form of PPP contract, the government can provide various other forms of "government support" to a project to help attract private investment, increase the level of government control, and/or reduce its risk exposure to a project. This additional government support can include measures such as the following:

- (i) project preparation,
- (ii) up-front procurement of land,
- (iii) contractual ability to generate third-party revenues from the assets,
- (iv) contract extensions,
- (v) protection from competition,
- (vi) political risk guarantees,
- (vii) exchange rate guarantees on project revenues,
- (viii) output and capital subsidies (viability gap payments),
- (ix) offtake payment guarantees,

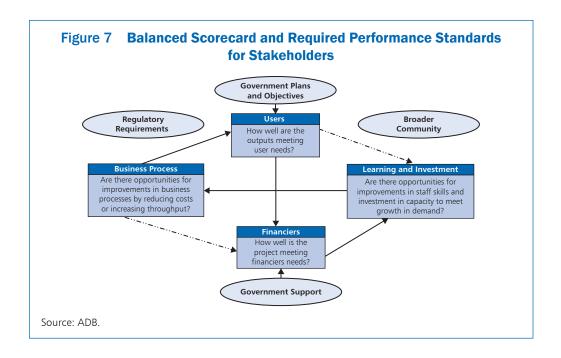
- (x) minimum revenue guarantees,
- (xi) tax and customs benefits,
- (xii) profit- and cost-sharing arrangements,
- (xiii) public loans, and
- (xiv) public equity participation.

Government support, particularly in regard to up-front preparation and the use of guarantees, has the potential to leverage the government's risk-bearing capacity and increase the total amount invested by the private sector in infrastructure projects. The cost of many of these forms of support can be recovered by the government through mechanisms such as project preparation fees and guarantee fees that are levied on the successful private sector contractor. These benefits need to be weighed against the direct and contingent risks assumed by the government, and will vary for each project and form of government support provided to a project. The identification of the preferred contractual structure and forms and levels of government support that are used by the government to implement a PPP project requires a careful analysis of the trade-offs for users and/or the government in terms of VFM, the extent the support improves bankability for private sector financiers, and the affordability of the support to government. The provision of direct and contingent support also requires the development of risk management capacity to optimize the use of guarantees at the project level and ensure it is affordable for the government on a portfolio basis. Supporting mitigation measures may be required, such as ring-fencing of guarantees, creation of cash reserves, and establishment of standby credit facilities, to act as a buffer and offset the impact of unforeseen shocks. These measures require the integration of PPP risk management into the overall debt-management functions of the government.

What is Required to Prepare, Transact, and Manage a Public-Private Partnership Contract?

The preparation of a PPP requires the clear definition of project objectives and targets. An important feature of PPPs is the requirement for the proposed structure to reconcile the interests of a wide range of stakeholders that includes the GCA as initiator of the project, users who will consume the outputs, private financiers who will supply the outputs, and the national government that will share project risks with the private sector. There will also be associated parties such as neighbors who will be concerned about social and environmental impacts, and regulators responsible for health, safety, and environmental standards. A PPP needs to reconcile these various stakeholder requirements by developing market-based technical and financial solutions that trade off output quality standards, processing speeds and costs, capacity of staff and facilities, cost and quantity of various forms of inputs and capital (e.g., debt and equity), and the risk-bearing capacity of government. These requirements are all interrelated, and the targeted standards need to be integrated and reconciled within a performance management framework such as a balanced scorecard system (Figure 7). The derived performance standards can be used to guide project design, evaluate tenders, and provide targets that are used for monitoring and evaluation of projects.

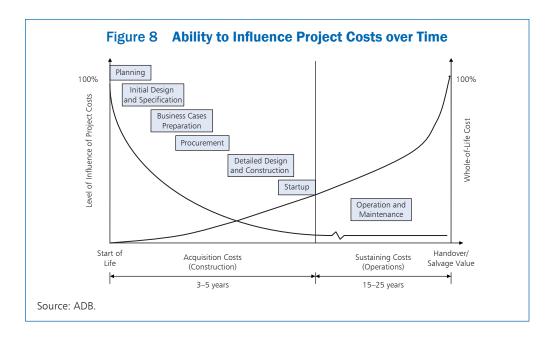
The preparation of a PPP infrastructure project requires a clearly defined road map. Project preparation occurs over a 2–5-year time frame, and the construction and operation periods can extend over a period of 15–50 years. The long preparation period, and the

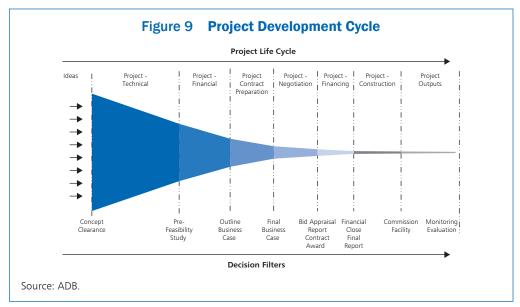


need to design a facility that reflects user requirements over an extended operational time frame, makes the preparation of these projects expensive. The early stages of preparation are critical for the overall success of the project. While most project costs are incurred during the operating period, the government's ability to influence costs only occurs in the early stages of project preparation and design when decisions are being made on the scope and scale of the facilities. Once the design is finalized and construction is complete, it becomes difficult for all parties to influence costs as the technical parameters for operation and maintenance are fixed. It is therefore essential that the government ensures the project is properly prepared and the design meets users' requirements and demonstrates VFM over the term of the PPP contract prior to the project being approved. The trade-offs between the government's ability to influence project costs and the level of funding committed over the life of a project are illustrated in Figure 8.

A phased approach is required to minimize development risks, and the government needs to keep an open mind about project requirements and technical solutions in the early stages of preparation. As the project concept firms up and feasibility is confirmed, increasing levels of resources can be committed by the government to the project. This process is managed by requiring the GCA and its advisers to prepare a clearly defined set of project deliverables where the findings are agreed by the GCA and the national government before moving to the next stage (Figure 9).

The first stage of a PPP project appraisal consists of receipt of a confirmation from the GCA that the project reflects its planning requirements and it is committed to developing the project. In most cases, the GCA should enter a cost-sharing arrangement with the national government to cover the costs of project preparation if the project does not proceed, to ensure it is committed to the project. The project should then be screened by independent technical and financial specialists, using predefined criteria, to confirm the project can potentially be developed as a PPP (Appendix 5). It is important to assess





the capacity of the GCA, and the institutional arrangements and skills needed to support the preparation and implementation of a PPP. These findings can be documented in a project concept report.

The second phase of the project preparation analysis is concerned with the establishment of a project development team and preparation of a pre-feasibility study (PFS) that addresses the following:

- (i) review of sector plans;
- (ii) institutional analysis;

- (iii) stakeholder analysis;
- (iv) assessment of laws and regulatory standards;
- (v) current supply arrangements;
- (vi) resource availability;
- (vii) market needs analysis;
- (viii) review of technical options;
- (ix) social and environmental safeguards analysis;
- (x) market sounding with potential private sector contractors;
- (xi) economic and financial analysis;
- (xii) need for government support; and
- (xiii) confirmation of technical feasibility, and identification of actions required to implement the project.

The PFS needs to evaluate different technical options and confirm that the preferred option is feasible and provides a basic design, scope of works, and cost estimate for a reference project that can be used to guide contract preparation and tender evaluation. The focus of the analysis then shifts to the preparation of an outline business case (OBC), which identifies a preferred method of procurement, and program of government support. The OBC defines the scope of the PPP contract, specifies the output requirements that will be contracted, and defines a payment mechanism. The OBC requires further market sounding with prospective financiers, an evaluation of the risks and mitigation costs under various public sector and PPP procurement structures, and an assessment of the need for government support. The OBC identifies the key performance indicators (KPIs) that will form part of the payment mechanism and be used for monitoring and evaluation purposes (Table 4).

The selection of the preferred procurement option defined in the OBC will be based on factors such as ability to define outputs, presence of sunk costs, availability of resources, availability of third-party revenues, certainty of delivery, flexibility for the government to adjust to new developments, institutional capacity, stakeholder acceptability, time to deliver, user demand, and availability of government support. The evaluation of the government support package will be based on the criteria of generating the greatest VFM for the government, being financially feasible (bankable), and support measures being affordable to government. If the national government agrees to the proposed government support structure and the GCA decides to proceed with a PPP then the project will need to be made ready for transaction. Project preparation encompasses issues such as land acquisition, and establishment of social and environmental safeguard frameworks.

Once the project is ready to be transacted, a procurement committee and a transaction team need to be established. The transaction team will finalize due diligence arrangements; prepare the bid documents such as an information memorandum, project advertisement, request for qualification (RFQ), request for proposals (RFP), project legal documents, and tender procedures; and define the contract management arrangements. These parameters will be presented in a final business case (FBC) that is agreed by the GCA, the MEF, and other stakeholders. Following stakeholder approval, the project will then be tendered to the market using international competitive bidding, and the final terms of the agreement negotiated with private sector bidders. Following

Table 4 Examples of Key Performance Indicators

	Requirements	Basis of Measurement	Current	Targeted	Actual	Performance Gap
Government Objectives						
Resources	Availability	Surveys				
Market	Market Coverage	Surveys				
External Stakeholders						
Government contracting agency	Relevance Effectiveness Efficiency Sustainability	Objectives and targets defined in plans				
Regulators	Health Safety Environment	Minimum standards				
Neighbors	Social safeguards Environmental safeguards	Minimum standards Maximum emissions				
Suppliers	Inputs: • Quantity • Quality • Availability • Cost	Surveys Market sounding				
Internal Stakeholders						
Users	Outputs: • Quantity • Quality • Availability • Cost	User demand User standards User standards Willingness to pay Ability to pay				
Financiers	Return on equity Return on debt	Opportunity cost Availability funds				
Government	VFM Affordability	Opportunity cost Availability funds/ guarantee capacity				
Technical						
Process	Cycle time Technical losses Unit cost	Minimum standards based on user demand				
Capacity	Inventory Utilization rate Availability inputs	Opportunity cost users financiers				

VFM = value for money. Source: ADB. confirmation of the bid appraisal report by the GCA and the relevant government agencies, the concession is awarded to a preferred bidder, and funding finalized in accordance with the terms agreed.

Following contract tendering, the GCA will need to put in place project management systems. The GCA will require specialist engineering advisors to confirm that construction has been performed in accordance with the contract. The GCA will also need to put in place a management system to monitor and evaluate the contractor's performance in accordance with the output standards, and conduct market surveys and benchmark reviews defined in the contract. Detailed plans, maps, construction and output standards, KPIs, data collection systems, and reporting and auditing procedures will need to be developed and implemented to support these arrangements. Back-to-back risk management provisions will need to be put in place to mitigate any potential risks retained by the government.

What Are the Deliverables and Resource Requirements for Preparing and Managing Projects?

The design and implementation of infrastructure projects using PPPs is a specialized task that requires the use of external consultants. The form and level of expertise required will vary over the life of the project, and a development process that can accommodate these changing needs is required. In the early stages of project preparation, the focus of the GCA is primarily on addressing regulatory, stakeholder, and technical issues. In the procurement stage, the project preparation inputs required by the GCA will be mainly financial and legal, with support being provided by technical specialists. Once the project has been successfully tendered, the main activity for the GCA is project monitoring and evaluation, which primarily requires technical and administrative skills.

Given the dynamic nature of the project life cycle and the resources required, the project development and management process can be divided into the following four phases and sub-components:

- Phase 1: Project Selection
 - o 1.1: Government Plans
 - o 1.2: Project Identification
- Phase 2: Project Preparation
 - ° 2.1: Pre-Feasibility Study; Outline Business Case
 - ° 2.2: Project Preparation
- Phase 3: Transaction Advisory
 - o 3.1: Final Business Case
 - o 3.2: Bid Implementation
- Phase 4: Contract Management
 - 4.1: Capacity Building
 - o 4.2: Contract Management

The project preparation process needs to reflect the requirements of both the GCA in terms of defining the project concept and preparing it for tender, and the central government, particularly for the MEF, in terms of ensuring government support will

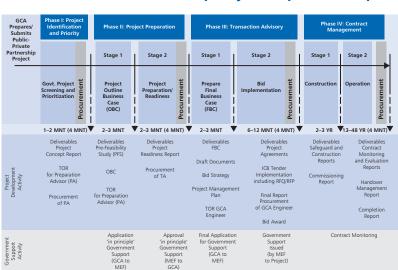


Figure 10 Public-Private Partnership Project Preparation Requirements

FBC = final business case, GCA = government contracting agency, ICB = international competitive bidding, MEF = Ministry of Economy and Finance, MNT = month, OBC = outline business case, PA = preparation advisor, RFP = request for proposal, RFQ = request for qualification, TA = transaction advisor, TOR = terms of reference, YR = year.

Source: ADB.

be available to make the project bankable. When engaging consultants to assist the GCA to prepare these studies and perform the associated tasks, detailed terms of reference (TORs) need to be prepared for advisors, and payment should only be made in accordance with outputs (deliverables) that reflect the various components of each phase. An illustration of the deliverables how this process can be managed is presented in Figure 10.

When defining these phases and outputs, it is important for the government to recognize that projects have widely varying characteristics. In some cases, projects will be developed in a sector, such as power, where the technology is known, the outputs are straightforward to define, and contracting requirements are well understood, the GCA may have already approved the project, and a feasibility study has been prepared. In other cases, there may be no government approvals in place and the project under consideration is located in a complex sector, such as health, where the outputs are difficult to specify, there is a wide range of technical solutions possible, and there are few existing examples of PPPs available. For these reasons, a high degree of flexibility is required when determining the type and level of consultant resources and time that is required at each stage in the project life cycle. While these parameters may vary, irrespective of the method of procurement, all projects will need to go through a similar process over their life cycle.

What Makes a Public-Private Partnership Program Successful?

PPP contracts typically have a long duration, and the principles guiding their design, award, and management are of paramount importance to the success of the PPP project.

More than 50 countries have started PPP programs, but not all of them have been successful in terms of investments made, outputs produced, and outcomes achieved. Typically, countries with strong public sector institutions administering the PPP process have performed best. Global PPP experience in both developed and emerging markets over the past 20 years provides the following relevant lessons learned:

- (i) Recognition that public-private partnership is not a universal solution. While PPPs are gaining international recognition as an important means of mobilizing private sector capital and expertise, they are not a universal solution to resolve underlying investment and performance problems. The respective costs and benefits associated with traditional public sector procurement and the use of PPP modalities have to be established. PPPs are not easy to develop or execute and require specialist skills and experience. Governments remain central to the delivery of infrastructure services, both as enablers for PPPs, and as parties to the PPP contracts. No actor can replace the government.
- (ii) Ensuring availability of physical resources. It is critical that the government has the powers to gain ownership and control of physical resources such as land and water underpinning infrastructure projects, and provide private sector contractors with access to necessary support services for projects. Governments require a right of "eminent domain" where they can compulsorily acquire land in the public interest for infrastructure such as roads or water transmission facilities. These procedures need to be perceived as being fair, and the compensation provided to existing landholders should be based on market values. Effective social and environmental safeguards can play a vital role ensuring that projects are properly prepared and economically and politically sustainable.
- (iii) Infrastructure sectors are open to private sector participation. In many countries, infrastructure services fall under the control of the government. PPPs provide a means of addressing this issue, whereby the government issues a "concession" to the private sector to access necessary resources and provide services, either directly to government, or to end users. The legislative framework within a country needs to permit the use of these instruments in the infrastructure sectors, and enable participation in these instruments by both local and foreign private investors and financiers. These ownership rights need to be supported by effective dispute resolution mechanisms. Private firms should be able to compete against state-owned enterprises (SOEs) on a level playing field when bidding for projects.
- (iv) Clear objective of maximizing value for money. In many countries, PPP projects place too great an emphasis on mobilizing private sector finance, rather than maximizing VFM. The focus on private sector financing can cause government agencies to lose sight of economic and financial fundamentals, and waste time and effort preparing projects that do not meet economic needs and cannot be made bankable to the private sector or affordable to government.
- (v) Clear public sector enabling framework policies and guidelines. The government needs to take a strategic approach to PPP, preferably in the form of an overall PPP policy statement, and prepare relevant sector policies, and comprehensive planning arrangements. The government has to take the lead in developing clear and conducive legal, regulatory, institutional, and financial frameworks supporting the development and implementation of PPPs. Existing regulations need to be transparently integrated into contractual arrangements. Clear rules of government support using fiscal and guarantee instruments,

management of the government's contingent and direct liabilities, and oversight are important. In terms of procurement and tendering processes, there should be a strong preference for competitive bidding with multiple bidders. Where unsolicited proposals are allowed, there need to be clear policies and procedures to ensure they are implemented in accordance with the interests of the government and subject to some form of market scrutiny through either a "Swiss Challenge" or some other similar mechanism.⁸ Once PPP projects are awarded, contracts must be enforced and honored through transparent regulatory and contract management arrangements, and dispute resolution and arbitration mechanisms.

- Need for strong political support and clear institutional arrangements. "Political economy" considerations need to be recognized when moving forward with a PPP program. There is a requirement for strong political commitment on the part of senior government leaders to champion, promote, and advance PPPs. There needs to be strong centralized body such as a PPP infrastructure development committee at senior levels of the government that establishes project priorities in accordance with sector plans, ensures coordination across agencies, monitors project preparation and implementation, and resolves issues that arise. This oversight body needs to be supported by key institutions within government, which have a clear definition of roles and responsibilities. and are provided adequate resources and staff to make them effective. The oversight body can then closely monitor projects and take steps to streamline processes and increase institutional capacity to deliver projects as required. It takes time and willingness by the government to experiment and to develop laws, regulations, and institutional arrangements that reflect a country's individual circumstances, and ensure smooth, rapid, and cost-effective project development systems are put in place.
- (vii) Effective project preparation capacity: public–private partnership unit. While the form, location, and functions of dedicated PPP units and associated project development facilities vary globally, it is clear that strong institutional support for planning, financing, and implementing effective project preparation is an important success factor. The most successful PPP frameworks tend to be based on a PPP unit that is established in the Ministry of Finance (Appendix 4). A PPP unit helps GCAs develop a pipeline of bankable projects through the preparation of PFSs and business cases, facilitates the development of standard project templates and/or documents, and ensures the PPP structures and processes (including procurement and contract management) are streamlined and consistently applied across GCAs at the national, provincial, and local levels. A PPP manual can be prepared to provide GCAs with a road map and templates for project report preparation and associated approval procedures.
- (viii) Effective risk management capacity: risk management unit. Successful PPP programs include mechanisms for the government to provide multi-year commitments (beyond the budget cycle), creditworthy support, and prudent management of the fiscal obligations (both direct and contingent) created by PPPs. Governments that use PPPs to build infrastructure usually assume contingent liabilities relating, for example, to early contract termination, or to revenue and debt guarantees. Deciding whether to assume these liabilities and, if so, determining how to value, monitor, and limit these risks requires specialist

⁸ A Swiss challenge is a form of public procurement that requires a government authority, which has received an unsolicited bid for a public project, to publish the bid and invite third parties to match or exceed it.

expertise. Countries typically rely on careful project preparation, competitive bidding, and a series of reviews of proposed PPP structures by a specialized RMU in the Ministry of Finance prior to and after contract signing. A set of standard contractual terms and review and approval procedures can be prepared to guide the provision of government support to PPPs and help manage the impact of the associated direct and contingent liabilities. Governments can also publish PPP contracts and project summaries and prepare financial reports on contingent liabilities in accordance with international financial reporting standards on a regular basis.

- (ix) Ensure effective contract management arrangements are in place. PPP contracts are complex and require specialist skills to ensure they are properly designed, monitored, evaluated, and enforced over the life of the contract. The tariff mechanism for the project outputs will be included in the contract and it will need to be revised on a regular basis to reflect changes in costs, such as inflation, that are beyond the control of the parties. There may also be occasions when the GCA wishes to change the scope of the contract, or there are disagreements over the way the terms of the contract are being implemented. Effective change mechanisms need to be built into the contract to allow regular market testing and benchmarking of services that can be used to rebase the tariff or revise the scope, scale, or phasing of the delivery of outputs. Where there are disagreements between the parties, there need to be effective contract management arrangements in place such as a contract administration committee that meets on a regular basis and is supported by transparent and effective regulation and arbitration mechanisms.
- (x) Ensuring availability of sufficient financial resources within government. Recognizing that governments need to prepare projects and that full cost recovery in infrastructure is often difficult to achieve because of tariff and/or demand considerations, governments are exploring new mechanisms to bring down costs and risks for infrastructure investors through (a) project development facilities; (b) capital grants to PPP projects (e.g., India Viability Gap Funds); (c) dedicated annuity funds to provide sustainable funding for the government's annual service or availability payments to PPPs (e.g., India Central Road Fund); (d) minimum revenue guarantees (e.g., the Republic of Korea); and (e) infrastructure finance facilities to provide long-term capital to PPPs (e.g., Indonesia Infrastructure Finance Facility).

PPPs are not easy to implement and will not provide a panacea for all of the country's infrastructure problems, but they represent an increasingly important modality for mobilizing private sector investment and expertise. For the government to develop PPPs, the enabling environment and the policy, legal, and regulatory frameworks must be right, and the government must develop processes and build capacity within the public sector institutions to plan, execute, and manage PPPs. It will take time and active management by the government to achieve an effective and efficient process. Capacity development initiatives within government agencies will form an important part of this program.

Public—Private Partnership Enabling Environment and Selected Sector Issues

Overview

Cambodia is at an early stage in developing its PPP program. By December 2011, there were only a small number of examples of major public investments involving foreign investors using PPPs and most projects have been greenfield telecom and energy projects. There is no advanced policy, legal, and regulatory framework, or a dedicated PPP unit and RMU. Nevertheless, there are some large PPPs in the power sector, and many small PPPs in sectors such as transport, energy, water, and sanitation. The government issued a basic decree, an Anukret, on BOT/Private Financing in February 1998 to regulate and manage private participation in infrastructure (PPI). The decree has facilitated financing of projects such as the National Highway Number 4 project and major roads around Phnom Penh. The government has issued PPP contracts in the airport, seaport, and railway sectors, and most significantly, the energy sector. Notwithstanding these successes, the government recognizes the need to continue to improve the governance of PPP transactions and their ongoing management. Measures to clarify the policy, legal, regulatory, and institutional arrangements are required. It will be necessary to put in place procedures that ensure coordinated development of PPP projects, increase transparency in the award of contracts, provide greater control over the liabilities assumed by the public sector under PPP contracts, provide effective supervision of contracts, and above all, realize VFM for Cambodia from its PPPs.

Enabling Environment

Land and Water Rights

The National Assembly passed a comprehensive Land Law in 2001. The law provides various forms of rights to land, including ownership, easement, mortgage (security) interests, concessions of the state, private land, and leases. Cadastral commissions have been established at the national and local levels to settle disputes over unregistered land and provide recognition of lawful possession. Land titles are still in the process of being registered and, in many cases, titles are not clear. For those parties with possession, proving 5 years of continuous possession is sufficient to convert this status to ownership through registration. Leases of 15 years or more can be transferred to a third party. Foreigners (apart from those of Cambodian origin) are prevented from owning land and they must either lease land or enter into a joint venture with a local partner. There are no restrictions on foreigners owning other forms of property rights such as leases,

concessions, or mortgages. The government has a right of eminent domain to acquire land for infrastructure that reflects the public interest, and it has been used successfully. Nevertheless, there are problems arising due to the lack of clarity of land titles, and further reforms may be required to address this issue to ensure infrastructure projects are politically sustainable. These factors suggest that land acquisition per se is not a constraint on the development of PPPs, but there appear to be issues arising related to the effectiveness of the resettlement programs being applied. Based on experience in other countries, there may also be issues associated with rights to extract water. Cambodia has large endowments of water, and availability does not appear to be a binding constraint at this stage.

Private Sector Participation in Infrastructure

It is important for sectors to be open to private sector participation by both domestic and foreign investors. In terms of foreign direct investment (FDI), Cambodia is one of the more open countries in East Asia and the Pacific region to foreign equity ownership and this has supported high levels of foreign investment from Asia. Most sectors are open to foreign investment, apart from the infrastructure sectors such as port and airport operations, and the electricity industry. Port operations are closed to foreign investment, and all ports are currently owned and operated by public port authorities. Foreign capital participation in the airport operations sector is limited to less than 50%. Companies where foreign nationals own more than 49% of the shares, and foreign-owned companies, are prohibited from buying land. Independent arbitration is an important requirement for foreign investment, and procedures in this area are still in the early stages of development. Cambodia's Law on Commercial Arbitration was passed in 2005 and it is based on the United Nations Commission on International Trade Law (UNCITRAL) Model Law. Overall. the environment for FDI is relatively open, and while there are ownership restrictions in sectors such as ports, they do not appear to be a constraint for PPPs, which are already occurring in these sectors, with foreign participation in some cases.

Competition against State-Owned Enterprises

The competitive procurement and operation of infrastructure is a key factor underpinning sustainable economic growth. Most infrastructure sectors are open to private sector participation, although there are some issues associated with competition. An ADB study in 2010 highlighted the importance of promoting competition in domestic markets to enhance private sector competitiveness. While Cambodia is an open economy with limited SOE presence, there is evidence of creeping regulatory restrictions on competition in domestic markets. Recent decisions by the MEF and the Ministry of Communications restricting price competition in the mobile phone sector is one example. As Cambodia advances, new and more complicated competition policy issues are emerging, especially in non-tradable goods sectors such as utilities (energy, telecommunications, etc.), and an institutional framework will need to be developed to address these issues.

The Ministry of Commerce (MOC) is aware of the emerging competition policy issues and it has established a working group that is responsible for developing a competition policy framework and drafting a competition law. Building awareness of competition policy issues will be a critical function of this working group. International best practice

⁹ ADB. 2010. Cambodia: Competition Policy in a Transitional Economy. Manila.

for competition policy in a transitional economy suggests legislation should reflect the following core principles: (i) it should focus on addressing the basic anti-competitive practices such as monopolies, cartels, and exclusive agreements; (ii) anti-competitive practices of SOEs should not be excluded from the legislation; (iii) the competition commission responsible for enforcing legislation should be administratively autonomous, well funded, and subject to rules of transparency in its decision making, such as posting reports on its website; and (iv) the competition agency should not be excluded from reviewing the impact on competition of proposed regulations.

Specific Issues

Policy Framework

In 2006, the government and the international development partners established the Private Sector Development Steering Committee (PSDC) chaired by the MEF, with the MOC as the vice chair. The PSDC established various sub-steering committees, including one on PPI. Following deliberations, a PPI policy paper that sets out the policies of the government with respect to future PPIs in Cambodia was issued and it describes the

- (i) PPI policy and its underlying principles,
- (ii) roles and responsibilities of the various agencies of the government with respect to PPI projects, and
- (iii) process for identifying and implementing PPI projects.

The PPI policy provided a framework for developing PPPs (Appendix 2). While this framework provides an excellent start, it has never been operationalized, and it needs to be updated to reflect the current environment. The policy framework defines PPI as "the transfer of a significant degree of investment, management and/or operating risk from the public to the private sector." This definition seems unnecessarily narrow, and it does not take into account the concept of "partnership" between the government and the private sector. Government support appears to be limited to the issuance of guarantees, and it does not provide for direct fiscal support.

Partnership implies a genuine sharing of risks between the public and private sectors, and introduces the concept of government support, effective project preparation, and risk management. These concepts could be usefully drawn out in the policy paper. As currently drafted, the Council for the Development of Cambodia (CDC) has responsibility for all PPP-related project development and coordination responsibilities. This scope appears too broad when compared to institutional arrangements used in other countries where PPPs play an important role in infrastructure development, and it does not recognize the central role of the MEF in this process. As currently drafted, the policy paper does not take into account the need for a PPP task force, a PPP unit, an RMU, or various other forms of institutions that would generally be regarded as important elements of a PPP program. The policy paper is silent on a wide range of issues associated with project preparation, provision of government support, contract tendering, and contract management that will need to be documented to fully operationalize the PPP program.

The policy paper notes that the line ministries are responsible for identifying PPP opportunities. This approach presupposes that PPPs are a strategic objective, whereas in practice, PPP is a method of procurement. This result suggests that the decision on the

preferred method of procurement follows the identification of sector investment needs, rather than being identified as part of the planning process. Not all infrastructure projects can be procured using a PPP structure, and their feasibility is critically dependent on the availability of government support, which will be decided in the context of developing the medium-term plans, annual budgetary allocations, and the government's risk-bearing capacity. Given these considerations, it is more appropriate for the decision on the method of procurement of a project to be taken as part of the government's planning and budgeting process, after the scope of the sector plans has been agreed and finalized. Selection can then be undertaken on the basis of a standardized set of criteria that can be used to identify and rank candidate PPP projects (Appendix 5).

Legal and Regulatory Framework

The National Assembly adopted the Law on Concessions (LOC) in 2007, which provides a legal framework for PPI. The LOC defines the following infrastructure sectors as being eligible for concessions:

- (i) power generation, transmission, and distribution;
- (ii) roads, bridges, rail, airport, seaport, and canal transportation facilities;
- (iii) water supply and treatment;
- (iv) sewerage and drainage;
- (v) irrigation and agriculture-related investment;
- (vi) solid waste management;
- (vii) health, education, and sports facilities;
- (viii) oil and gas; and
- (ix) telecommunication facilities.

The LOC permits selection of consultants through competitive bidding (national and international), or by a negotiated procedure. GCAs are provided authority to enter into concession agreements, subject to obtaining approvals to be defined in an implementing decree. Concessions can take a wide range of forms, including BOT, BOO, lease, or management agreements. Under the LOC, the CDC is responsible for reviewing and approving applications to the government to use concessions, and provides overall supervision of project preparation and capacity development within the public sector of concession agreements. The CDC will fulfill its mandate by acting as the focal point for PPI. The contents of a concession agreement are specified, and must include details on scope of works and services, standards, payment arrangements, incentives, risk allocation arrangements, and required commitments from the GCA. Government support is restricted to guarantees. The concessionaire is permitted to create security interests over its assets, and there is the potential, but no details, for step-in rights to be provided to the financiers, and for compensation to be provided to financiers in the event of early termination. Best practice suggests that LOCs should not be overly prescriptive, and should focus on essentials.¹⁰ However, the LOC does need to provide clarity and specificity about critical issues such as the availability of "step-in" rights and early termination provisions, and provide confirmation that the contractual undertakings by the GCA will be observed by the government. Further details on the basic elements of a LOC are presented in Appendix 3.

¹⁰ OECD. 2003. Basic Elements of a Law on Concession Agreements.

A draft sub-decree that would allow the LOC to be implemented has been prepared, but it is not approved. The main terms of the draft sub-decree are as follows:

- (i) GCAs must establish prequalification, evaluation, and award committees to oversee procurement using concessions.
- (ii) Projects must be in conformity with sector development plans, and be approved by the MEF.
- (iii) Procurement must be based on the principles of transparency, equality of treatment, and efficient competition.
- (iv) Bids or proposals will be rejected where there is fraud or corruption.
- (v) Proposals and bids must be treated in a confidential manner.
- (vi) Procedures and requirements are defined for conducting prequalification, requesting for proposals, and submitting bid securities.
- (vii) Technical criteria for evaluation of bids consist of technical soundness, compliance with environmental requirements, operational feasibility, and quality of services.
- (viii) Financial criteria can include present value of tolls, direct payments by the GCA, costs, level of financial support, soundness of arrangements, compliance with GCA requirements, and social and economic impacts.
- (ix) Procedures are defined for conducting the tender, obtaining approval of the contract from the CDC and the MEF, and bid award.
- (x) Post-award obligations of the parties are defined.
- (xi) Restrictions are placed on the use of the negotiated procedure, and it can only be used in situations where there is an urgent need, or there is only a single source capable of providing the service, or there is an absence of any competing bids within a reasonable time frame.
- (xii) Restrictions on the admissibility of unsolicited proposals are specified, and they can only be used for projects that are not in the sector development plan, are in the public interest, and are competitively tendered (with compensation being provided to the proponent if unsuccessful).
- (xiii) Procedures for the management and amendment of the contract are defined in general terms.

The draft sub-decree is the most important legal instrument in terms of defining the regulatory and institutional framework for PPPs, and it should provide sufficient detail to operationalize the LOC. In practice, the draft sub-decree focuses almost exclusively on the implementation of the transaction and provides GCAs with little direction and guidance on how to prepare and implement PPPs. The sub-decree only follows international practices such as those specified by UNCITRAL in general terms, 11 and this will limit its effectiveness as a means of attracting long-term finance from international sources.

The absence of a clear policy, legal, and regulatory framework and institutional capacity within government agencies is an important constraint on the use of PPPs. The LOC provides an overview of how PPP concessions can be granted in a competitive and transparent manner, but there is no agreed framework to guide implementation. As the framework currently stands, it does not adequately address institutional and capacity issues required to identify, prepare, transact, and monitor and evaluate the contracts. The

¹¹ United Nations. 2001. Legislative Guide on Privately Financed Infrastructure Projects. New York.

approval of the draft sub-decree would help address some of these issues, but it is largely silent about how PPPs will be integrated into the planning and budgeting process, and developed and financed at the institutional level. The separation of project preparation and risk management arrangements between the CDC and the MEF appears to create significant risks in terms of fiscal management. There is a lack of information on how issues will be addressed in areas such as the need for adequate preparation of feasible projects, a method of evaluating alternative designs to maximize potential for VFM while ensuring bankability and affordability to the government. There are few details on the way in which solicited and unsolicited projects will be tendered and evaluated, and how contracts will be managed. There is no discussion in the draft sub-decree of issues such as principles of risk allocation, use of standard contracts, or procedures to be followed to introduce a contract variation, or manage an event of early termination. As a result, there is no systematic framework in place for the government to manage project preparation, fiscal project obligations, and associated contingent risks. Defined procedures are needed to ensure the government's interests and risks are properly administered after the PPP projects commence operations. Similarly, these policies, laws, and regulations should reflect international best practice to ensure that PPPs prepared by the government attract international private sector interest and funding.

There is a lack of clarity about the nature and form of government support that can be provided to PPP projects, and the associated risk management arrangements. Potentially, government support for PPPs can range from contingent guarantees, through to long-term committed annual payments in the fiscal management system under BOT schemes. These forms of government support can help catalyze private investment, but they need to be carefully managed, as they can create large liabilities and contingent risks for the government. Most PPP projects have been procured on a noncompetitive and unsolicited basis. Some of these projects are quite large, particularly in the power sector, and the International Monetary Fund (IMF) noted, in a recent report on Cambodia's debt sustainability, that the hydropower projects currently being developed have the potential to create significant contingent liabilities for the government. ¹² A successful PPP program requires a well-established government support and risk management framework that is fully integrated with the PPP project preparation and management cycle to ensure the PPP program is sustainable. These government support arrangements will become increasingly important as the size of the PPP portfolio grows and the government seeks to develop PPP projects in social sectors such as health and education.

There is a lack of clarity about lenders' rights over project assets and their ability to gain "step-in" rights that can be used if a project gets into financial difficulty, or obtain compensation in the event of early termination. Traditionally, creditors' rights have been limited under Cambodian law. Another concern is the lack of clarity about the ability of foreign lenders to take security over the "leasehold rights" or the structures on the land constructed by a project company. The LOC and associated legislation is largely silent about the way in which events, such as early termination, will be managed. Prospective financiers note concerns with respect to dispute resolution and arbitration. There is also a lack of a "stabilization clause" in the LOC that would ensure financiers are protected from a change in the law. A National Arbitration Center is presently being established, so its effectiveness is yet to be tested. The arbitration law is modeled on UNCITRAL, and commercial disputes involving foreign investors can be heard in Singapore and Hong Kong, China. The weaknesses of the domestic

¹² IMF. 2011. Cambodia: 2010 Article IV Consultation.

arbitration arrangements may be acting as a constraint on foreign investment, and it is not clear whether a local court would automatically enforce an arbitral award, or retry the matter on its own merits. This issue may become increasingly important for the government and private sector financiers, as there are indications that some of the existing PPP contracts do not provide an effective change mechanism for either party.

Institutional Capacity

To date, there has been a lack of capacity within the government to develop a pipeline of bankable PPP projects (i.e., the ability to prepare quality feasibility studies and business cases, and carry out effective competitive tenders) and provide government support to projects within a comprehensive risk management framework. As a result, the development of the government's technical and management capacity is a clear prerequisite for an effective PPP program in Cambodia. In discussions by ADB and AFD with representatives of the CDC, the MEF, and line ministries such as MIME and the MPWT, it was apparent there was a high level of interest in obtaining capacity development assistance in the areas of structuring, transacting, and managing PPPs. All of these agencies are actively engaged in the evaluation of bids for PPPs, which are primarily being developed by the private sector on an unsolicited basis due to a lack of funds within GCAs to proactively prepare projects. Both MIME and the MPWT indicated they had identified projects in their sector development plans that might be suitable for development by the government as PPP projects. The establishment of a project development facility (PDF) would assist these agencies to proactively prepare and transact projects.

The donor community is supportive of the need for PPPs, but there are no other programs in place at the current time. The MPWT has made requests to various donor agencies to strengthen its capacity to prepare and manage PPP projects, but no assistance is pending. The World Bank provided assistance to prepare the PPI policy framework, the LOC and draft implementing decree, but it has no plans to provide further support at the current time. Similarly, agencies such as the Japan International Cooperation Agency (JICA) and the United States Agency for International Development (USAID) recognize the importance of PPPs, but they are not actively pursuing programs in this area at this point. This finding suggests the scope of assistance provided by ADB and/or ADF can be comprehensive, and should balance both the government's requirements to properly prepare projects, and manage associated fiscal matters relating to government support and risk management requirements.

Financing Issues

The lack of financial viability of many potential PPP projects and limited availability of local long-term sources of capital constrain the development of bankable PPPs in Cambodia. Tariff levels for infrastructure appear to be set at full cost recovery levels in most sectors apart from power, and some toll roads are present on a limited scale, but there has been little investment. At the current time, there are no PPPs in sectors such as health and education. In order for the government to encourage the use of PPPs in sectors such as urban transport, and health and education, it may want to consider the establishment of a viability gap fund (VGF) for projects that have a strong economic justification, but are not financially viable. As part of this process, the MEF would need

to assess how it would manage direct and contingent liabilities under various viability gap schemes. In many cases, the government can provide direct funding for PPP projects through up-front provision of assets such as land, and capital expenditure grants, or through annuity payment arrangements. Options for developing these arrangements will need to be reviewed by the government.

The finance sector in Cambodia is still relatively underdeveloped and unable to provide long-term capital needed by investors to develop large-scale infrastructure projects. There is no capital market in Cambodia, although the government intends to operationalize its stock exchange shortly by partially listing shares in four SOEs. For the government to attract large amounts of long-term finance from foreign sources, it will need to offer credit enhancements and guarantee instruments to make PPP projects bankable. The government will also need to consider how exchange risk will be addressed. Many PPPs will generate a source of revenues in local currency, while a substantial part of the debt is likely to be denominated in foreign currencies (mainly US dollars). Some form of an exchange rate guarantee mechanism may need to be provided by the government to attract potential private sector sponsors.

Fiscal Risk Management Systems

Contingent liabilities, in particular those related to the growing number of BOT hydropower schemes, constitute significant, but difficult to quantify, risks to the government's debt outlook. There is a shift anticipated in the form of ODA financing from grants to loans that would also add to the country's debt burden. The IMF has noted in its recent debt sustainability analysis for 2010 that budget execution and recording continue to be fragmented, and this is hampering an assessment of fiscal and quasi-fiscal activities and effective budget planning. Overall, the country's debt servicing capacity was categorized by the IMF as being "at risk," although the probability of issues arising is considered low. In light of Cambodia's need for major infrastructure investment and given its limited scope for servicing larger levels of debt, the IMF recommended that the government monitor these types of commitments closely and transparently. The government can consider a number of options for improving its risk management capacity, including developing and maintaining an inventory of all concessions granted, and building and improving capacity to analyze the impact of direct and contingent liabilities on debt sustainability. The establishment of an RMU would help support this program.

Selected Sectors and Public-Private Partnership

This section provides a brief overview of major PPP-related issues and opportunities in selected infrastructure sectors, namely, power, transport, and water.

Power Sector

Cambodia has gone through some very difficult years of electric power shortages. The level of electrification in Cambodia at about 24% remains among the lowest in Southeast Asia. At present, less than 16% of the households in Cambodia have access to electricity (urban 53.6%, rural 8.6%) and the per capita electricity consumption of 45 kilowatthours (kWh) per year is low when compared to that of other East Asian countries. In

2009, total installed electricity generation capacity reached 372 megawatts (MW), of which (i) 3.6% was provided by hydropower plants, (ii) 91.4% by small diesel units and large-scale heavy fuel oil generators, (iii) 1.6% by biomass and wood fuel plants, and (iv) 3.5% by coal. About 87% of the country's population (more than 11 million people, located mainly in rural areas) use electricity from automobile batteries, or kerosene and candles for lighting.

Many provincial and district towns are still supplied through isolated systems owned and operated by private rural electricity enterprises (REEs) using their own generation from imported diesel and heavy fuel oil. Average electricity tariffs are high, and the reliability and quality of electricity services from isolated systems administered by REEs is generally poor. Supplies are intermittent and often limited to just 4–5 evening hours at a maximum. The limited availability of electricity supply, coupled with high electricity costs, severely constrains development. Domestic firms and foreign investors identify the high costs and electricity supply shortages as primary constraints to doing business in Cambodia. Expensive power is also limiting the government's aims to diversify from garments and tourism to other sources of growth such as light manufacturing and agribusiness.

The Electricity Authority of Cambodia (EAC) has recently been established as the independent regulator of the electricity sector to provide oversight of end user tariffs. Electricité du Cambodge (EDC) is a state-owned limited liability company that has the sole authority to generate, transmit, and distribute electric power throughout Cambodia. Electric utilities in six provincial towns have been integrated into the EDC network, while the power utilities of other provinces still remain under the joint control of EDC in association with provincial authorities. As the reach of the EDC grid is limited to the core urban areas of Phnom Penh, small and micro enterprises are involved in production and distribution through privately owned small generators, and tariffs can reach levels of up to \$0.50 per kWh. The tariff rates are high due to transaction commissions, as well as production and distribution losses, lack of economies of scale, and multiple layers of distribution.

Domestic demand for power is estimated to grow, on average, by 26% per year up to 2015. The government's objective is to increase per capita energy consumption to 350 kWh by 2015 and to achieve an electrification rate of 53.9% by 2020. The government is aiming for 100% electrification of villages by 2020 and 70% of households by 2030. EDC's primary focus is Phnom Penh, and it has been constrained in its ability to develop the network due to the tariff structure that is set, in many cases, at levels below cost. EDC intends to continue to partner with private independent power producers (IPPs) to develop generation capacity and REEs to expand, operate, and maintain low voltage distribution and service lines in rural areas. As a mediumterm measure, the government's strategy for development of energy generation will continue to be based on importing electricity from neighboring countries under GMS power trade initiatives to provide low-cost electricity services, facilitating grid-extension and building distribution networks to meet demand. Cambodia has good potential for renewable energy development, in particular solar energy, mini-hydro, and biomass gasification. These resources can be developed to (i) generate additional electricity to reduce network losses and improve network stability, (ii) reduce dependence on expensive imported diesel fuel, and (iii) provide electricity to rural areas. Cambodia also has untapped and mostly unquantified geological potential for petroleum accumulation. Natural gas reserves have not yet been determined. Preliminary estimates indicate coal deposits of about 7 million tons.

The government has encouraged the private sector to invest in the energy sector to supplement EDC's capacity since 1996. The promotion of private participation in electrification is governed by Cambodia's Electricity Law, 2001. The government continues to focus on attracting private domestic and foreign investments in (i) oil and gas exploitation, (ii) energy generation from indigenous resources such as hydropower, and (iii) energy transmission system development. The government has been making increasing use of private IPPs to develop capacity for generation and the transmission system. Several large-scale power generation projects (hydropower and coal) are being developed over the next 5 years using IPPs, and the government is expanding the rural grid with private sector participation at a total estimated cost of \$1.37 billion. These developments will facilitate the expansion of the distribution network from provincial towns into rural areas and reduce electricity costs by displacing inefficient generation based on imported fuel. Displacing generation from diesel and heavy fuel oil plants will also contribute to the government's climate change mitigation efforts.

Despite an increase in the production capacity of government-owned production units and IPPs, and plans for an increase in supply through internal electricity generation and imports, there is a large gap between supply and demand. The government is committed to encouraging PPP in power generation. Given the continued growth of electricity demand and the need for private sector investment in the sector, there appears to be substantial opportunities for ADB and AFD to play an important role in promoting PPPs in this sector through upstream and downstream activities, in terms of both sovereign and nonsovereign operations using PPP instruments such as BOO schemes.

Transport Sector

The transport sector in Cambodia is comprised of roads, railways, and ports. Road transport is the largest subsector. The MPWT is responsible for administering the national and provincial roads and manages an ongoing annual infrastructure investment program valued at \$235 million per year. GMS infrastructure improvements for road traffic are advancing rapidly. Cross-border facilities exist at Poipet and Bavet, and other related infrastructure investments are planned or in progress. The Ministry of Rural Development (MRD) manages 28,000 km of rural roads, which represent 71% of the road network. The rural roads tend to be of a poor standard, being surfaced by earth or laterite. The MRD's ongoing investment program for rural road development totals \$241 million, and it is seeking to expand its program. The urban and rural road infrastructure requires significant investment and maintenance to improve standards. Poor road conditions and inadequate drainage systems have resulted in traffic congestion, high transportation costs, and increased traffic accidents. Several roads have been developed using private concessions, although levels of investment appear to be low.

The Department of Railways is responsible for administering the railway system, which is comprised of the northern line from Phnom Penh to Poipet (386 km) on the border with Thailand and the southern line from Phnom Penh to Sihanoukville port (264 km). The railway in Cambodia forms part of the GMS Southern Economic Corridor, which aims to provide seamless transport services on a fully integrated GMS transport network. This integration will benefit Cambodia by promoting a multimodal transport network, leading to greater competitiveness through reduced travel times and transport costs. Rail infrastructure is being rehabilitated under a series of reforms and investments, and a PPP contract that enabled freight rail services to resume in October 2010. Improvements include the GMS rail cross-border facility and a rail

and road freight terminal near Poipet. The newly established railway is not expected to provide passenger services. A railway from Thailand through to Viet Nam would complete a route through the PRC (as part of the GMS). To achieve this objective, a new railway line is required from Phnom Penh to the northeast border where it will link to Ho Chi Minh City. It is anticipated that the PRC will provide development assistance to meet the project's high cost (\$500 million–\$600 million).

Ports, both inland (Phnom Penh) and on the coast (Sihanoukville), play an important role in the economy, as well as three international airports (Phnom Penh, Siem Reap, and Sihanoukville). The water transport system in Cambodia is comprised of 1,750 km of inland waterways, although all-year navigation is only possible along 580 km of the Mekong River and its tributaries. Primary usage is for petroleum, containers, and general cargo. Barges operate along the river to Phnom Penh. Inland water transport has been on the decline in recent years as cargoes have switched to roads. Phnom Penh and Sihanoukville ports are being upgraded, and a 70-hectare economic development zone is being created in Sihanoukville. Air transport is administered under an "open skies" policy, and the international airports at Phnom Penh, Siem Reap, and Sihanoukville are operated under PPPs with the Société Concessionaire de l'Aéroport. Phnom Penh and Siem Reap airports provide access for 1.5 million tourists per year, who account for a third of Cambodia's GDP. The domestic airports are managed by the State Secretariat of Civil Aviation (SSCA), and they only offer infrequent service to a small number of passengers. The Ministry of Planning has identified six high-priority infrastructure development projects for five of these domestic airports.

Similar to the power sector there is a large gap between supply and demand in the transport sector, leading to a lack of connectivity to markets, and lost economic opportunity. High transport operation, maintenance, and logistics costs are leading to low competitiveness, and unsafe and unsustainable transport infrastructure. Under the NSDP Update, the government intends to attract private sector investment for transport infrastructure. While investment opportunities in airports appear limited at this stage, there are opportunities for waterway ports. Private sector participation in toll road/expressway projects is still at a nascent stage of development.

Given the above, there would appear to be significant opportunities for ADB and AFD, particularly in the waterway ports and roads sectors, using a mix of concessions and BOT structures.

Water Sector

The water sector is being impacted by rapidly intensifying urbanization. The urban sector accounts for 20% of the population and approximately 50% of GDP. By 2020, the urban population is expected to account for 30% of the population and may account for 70% of GDP. Phnom Penh dominates the urban sector, accounting for 55% of the urban population, and it currently attracts about 80% of investments and 21,800 immigrants per year. There are significant regional disparities, with more than 76% of residents in Phnom Penh having access to piped water supply compared to the national average of 42%. Private companies (or small-scale providers) provide access to water supply for a further 10% of the urban population. Wastewater treatment plants exist in Phnom Penh, Preah Sihanouk, Siem Reap, and Svay Rieng. Additional small-scale systems exist at health facilities at various locations in Cambodia. In areas without coverage, wastewater

is discharged directly to the subsoil or via open drainage channels to surface water, or using various forms of on-site sanitation facilities.

The water sector in Cambodia is highly decentralized, with the national ministries MIME and the MRD retaining authority over water sector policy and approval of major projects, while the local government agencies are responsible for the water supply services in their respective jurisdictions. There is no independent regulator in place to oversee tariff adjustments. While the system is expanding, investment is constrained by difficulties in accessing sufficient funds to increase coverage and improve services. There are also institutional challenges impacting the system following the government's comprehensive decentralization and deconcentration reform program. The Strategic Framework for Decentralization and Deconcentration Reforms of 2005 gives legal responsibility to provinces, districts, and commune councils to administer their affairs, including the preparation of development plans and the oversight and evaluation of projects.

The government considers improved access to water supply and sanitation to be a prerequisite for poverty reduction. MIME and the MRD jointly prepared the National Policy on Water and Sanitation in February 2003. A sector strategy for urban and rural water supply and sanitation (2010–2028) has recently been prepared which estimates the amount of investment required in the sector up to 2028 is \$19 billion. In March 2010, MIME finalized its action plan for 2009–2013, focusing on three programs: (i) facilitating PPPs, (ii) strengthening the management of publicly owned water supply agencies, and (iii) integrating urban water supply with urban environmental management. Considering the large investment needs in the sector, expansion of the local private sector is seen by the government as being essential in both rural and urban areas. There is a bulk water project in Preah Sihanouk and more than 300 small-scale private water supply operators are registered, but capacity is low, operating costs are high, and service delivery is poor. Effective regulation is required to facilitate investment from the private sector. The MRD is presently scaling up its efforts to increase private sector involvement in rural water supply and sanitation, and Phnom Penh has some small-scale community-based solid waste management projects, but much more could be done in this area.

In terms of future potential for ADB and AFD PPP-related activities in the water sector, there appear to be large project development opportunities, particularly in the area of bulk water using BOT structures.

Findings, Potential Assistance, and Next Steps

Findings

The Cambodian economy has made a strong recovery after the financial crisis in 2008, with high levels of FDI. The country has many attractive features for investors, including a low-cost workforce, improving transport connectivity with neighboring countries, and a large and growing consumer base. Offsetting these factors, the coverage of infrastructure in Cambodia is low compared to other countries in Asia, and it is having a negative impact on economic growth and the development of new sectors. Industrialization and urbanization rates are rising rapidly, and there are increasing demands for new and improved infrastructure and related services. The total investment for infrastructure in Cambodia is estimated to be in the range of \$12 billion—\$16 billion from 2013 to 2022, although in practice, this figure could be much higher, given estimated investment needs in sectors such as water.

PPPs can help meet this gap and leverage private sector investment in infrastructure. The government has recognized the importance of PPP and prepared a draft policy paper. The LOC is in place, but the draft sub-decree that would allow it to be implemented has not been approved. Despite the absence of a legal framework, a significant number of PPPs have been developed in Cambodia, and further PPP projects are being planned in the power sector. While the number of PPPs occurring in Cambodia is impressive, the overall level of private investment outside the power sector in areas such as water and transport is low and PPPs do not appear to be realizing their full potential.

The government has prepared comprehensive sector development plans and views PPPs as an important means of achieving these goals. There is a clear consensus among a wide range of stakeholders (government, private sector, and other donors) that PPPs provide an important means of financing the country's infrastructure needs. To a lesser extent, PPPs are viewed as a source of VFM to improve efficiency and service delivery to users and gain access to new expertise and technology. Despite this supportive environment, the PPP projects being proposed are often quite small and emerge on an ad hoc basis. PPPs are not standardized, and they tend to be issued on a reactive, unsolicited, and negotiated basis, rather than through proactive government preparation and competitive tendering. As a result, the amount of funds being raised through PPPs is below potential, and it is unlikely the infrastructure services provided accurately reflect market needs. There is no PPP investment in social sectors such as health and education, and the government currently lacks a credible PPP project pipeline.

The enabling environment for PPPs is relatively open. Some private sector participation is already occurring in most infrastructure sectors, which is being supported by limited

FDI. Land acquisition does not appear to be a constraint, but there appear to be issues arising about the effectiveness of the resettlement programs that are being applied. The government has a right of eminent domain to acquire land for infrastructure that reflects the public interest, and it has been used successfully by the government. Nevertheless, there are problems arising due to the lack of clarity of land titles, and further reforms may be required to address this issue to ensure infrastructure projects are politically sustainable. There are also some concerns in regard to the effectiveness of legal and regulatory institutions, particularly in the area of competition. A National Arbitration Center is presently being established, but the effectiveness of this institution has not yet been tested. The arbitration law is modeled on UNCITRAL, and commercial disputes involving foreign investors can be heard in Singapore and Hong Kong, China. The weaknesses of the domestic arbitration arrangements may be acting as a constraint on foreign investment, and it is not clear whether a local court would automatically enforce an arbitral award, or retry the matter on its own merits. This issue may become increasingly important for the government and private sector financiers, as there are indications that some of the existing PPP contracts do not provide an effective change mechanism for either party.

There is a need for a clear policy rationale for PPP and appropriate government support and risk-sharing arrangements. The government needs to recognize that the efficiency and improved infrastructure services gains that can be obtained through successful PPPs are, over the long term, more important than the objective of mobilizing private finance to help fill a public sector budget gap. The government should ensure the PPP policy provides a clear and consistent focus on VFM; effective laws and regulations; institutional arrangements; and a well-understood process to prepare, transact, and manage PPPs. The policy framework needs to balance private sector concerns about PPP constraints and the need for government support to make a fair return on their investment capital, versus the risks that will need to be retained and managed by the government. Government support instruments for PPPs can range from contingent guarantees, through to long-term committed annual payments in the fiscal management system under BOT schemes. These forms of government support can help catalyze private investment, but they need to be carefully managed, as they can create large direct and contingent risks for the government. As of December 2012, most PPP projects have been procured on a noncompetitive and unsolicited basis. Some of these projects are quite large, particularly in the power sector, and the IMF noted in a recent report on Cambodia's debt sustainability that the hydropower projects have the potential to create significant contingent liabilities for the government. A successful PPP program requires a well-established government support and risk management framework that is fully integrated with the PPP project preparation and management cycle, to ensure the PPP program is sustainable. These government support arrangements will become increasingly important as the size of the PPP portfolio grows and the government seeks to develop PPP projects in social sectors such as health and education.

The legal, regulatory, and governance environment has constrained the development of transparent and effective PPPs, and credible institutional arrangements need to be put in place to manage PPPs. The LOC does not address institutional and capacity issues required to identify, prepare, transact, and monitor and evaluate the contracts. The approval of the draft sub-decree would help address many of these issues, but it is largely silent about how PPPs will be developed and financed at the institutional level. There is a lack of detail on how issues will be addressed in areas such as the need for adequate project preparation of feasible projects, the method of evaluating alternative

project designs to maximize potential for VFM and ensure bankability and affordability, the way in which solicited and unsolicited projects will be tendered and evaluated, and how contracts will be managed. There is no discussion in the draft sub-decree on issues such as risk allocation, the use of standard contracts, or procedures to be followed to introduce a contract variation, or manage an event of early termination. As a result, there is no systematic framework in place for the government to manage project preparation, fiscal project obligations, and associated contingent risks. Defined procedures are needed to ensure the government's interests and risks are properly administered after the PPP projects commence operations.

Financial constraints are an important factor determining how the government's infrastructure development plans are being implemented. Most funding for infrastructure is sourced from user fees from services provided by SOEs, and through public sector borrowing on a concessional basis. SOEs have limited capacity to borrow due to the lack of availability of long-term debt in financial markets. The amount of public sector borrowing is limited by the size of the country's tax base, which is low and does not reflect demand for infrastructure facilities and services. PPPs could potentially assist the government in its efforts to address the infrastructure gap, but further work is required to realize this potential. Government agencies do not have access to funds and expertise to proactively prepare, tender, and manage PPP projects, and they are reliant on the private sector to perform many of these functions on an unsolicited and noncompetitive basis. The government has limited ability to develop projects that have a strong economic justification, but financial returns to the private sector do not meet commercial levels. The private sector is also subject to financial constraints due to the absence of long-term capital in the domestic financial markets. PPPs would enable the private sector to mobilize long-term funds through the effective use of a government support mechanism.

It will take time for the government to develop all of the necessary institutions and financial arrangements for a PPP program. Often, countries that embark on a PPP program are tempted to pursue projects that are too ambitious and take shortcuts in an attempt to accelerate the development of the PPP program and achieve quick results. These actions can lead to costly project failures and delays for the government, and can be avoided through up-front planning, institutional capacity building, and appropriate project preparation and management. As a result, it is preferable for the government to implement a phased PPP development program that is integrated into its planning and budgeting process. Initially, the focus should be on clarifying the PPP policy, law, regulation, and institutions, particularly in regard to the establishment of a PPP unit and a risk management unit (RMU). The government can then shift its focus to preparation of a small set of pathfinder projects using funds sourced from a project development facility (PDF). These projects should be based on international models with a track record of success that can be easily replicated and are scalable. The successful execution of these projects will help create political support and investor confidence. Adequate project preparation will be vital for the success of this program (Appendixes 4 and 5).

Potential Areas of Assistance

PPPs are an important component of the infrastructure development programs of the government and ADB and AFD. Representatives of the government have expressed

a strong interest in receiving assistance to develop PPPs. This support would enable the government to take a much more proactive role in PPP project development, and management of the associated risks. Given these parameters, there appears to be an excellent opportunity for increased PPP engagement by ADB and AFD in Cambodia. Sectors of primary interest would include power, transport, water, and possibly tertiary education. PPP opportunities for primary education and/or health appear to be limited at this stage. Next steps include the following:

General Forms of Assistance

Continue to support sector-level work in the power, transport, and water sectors. Ongoing technical assistance (TA) and project support efforts represent an important mechanism to advance the PPP agenda. ADB and AFD have considerable experience in the power, transport (particularly roads and urban transport), and water sectors, which would provide opportunities to engage with the government in promoting private sector participation (e.g., by using output-based management contracts as a first step) and preparing potential PPP transactions. In the power sector, there are opportunities to support innovative PPP transactions, which would provide an avenue for addressing broader sector reform issues. Build-own-operate (BOO) power projects provide an opportunity for potential nonsovereign and private sector operations. ADB and/or AFD may want to consider participating in port and airport projects, as they represent some of the most financially viable PPPs and form critical components of the government's connectivity programs. In the water sector, ADB and/or AFD can consider targeted water sector interventions in areas such as bulk water using structures such as buildoperate-transfer (BOT). In particular, there is potential to encourage the development of integrated water sector projects that include not only bulk water supply but also network and distribution operations through collaborative activities between the public and private sectors.

Use PPPs as a key strategic program modality to support a range of development objectives. The approach to developing and managing PPPs can be incorporated and mainstreamed in project preparation, as appropriate, and ensure effective coordination between public and private sector operations. ADB's recently completed country partnership strategy (CPS) 2011–2013 provides a means to mainstream PPP approaches in project preparation, and seek synergies to promote sector policy reforms and provide capacity-building support, while private sector operations can provide assistance to catalyze private sector investments. ADB and/or AFD can also pursue opportunities to collaborate with other donors and members of the private sector to promote the PPP agenda and support project preparation and implementation.

Specific Forms of Assistance

ADB and/or AFD could provide the MEF with TA to review existing policies, laws, regulations, and institutions.¹³ As part of this analysis, it would be important to clearly differentiate between the "front office" role of the Council for the Development

This initiative is in line with the CPS, 2011–2013, which states: "Where appropriate, technical assistance will support and facilitate project development, address entry barriers, improve governance, and develop capacity." The concept paper for an S-PATA project has been approved by ADB Management. In addition, a provision has been made for TA of \$800,000 in 2012, a \$2.5 million project design facility in 2012, and an Asian Development Fund loan for \$25 million in 2016. These amounts could be adjusted, subject to resource availability.

of Cambodia (CDC), which has overall responsibility for the strategic direction and coordination of the PPP program in areas such as licenses, and the "back office" operational responsibilities that need to be performed by the MEF and the prospective government contracting agencies (GCAs). The institutional arrangements for a PPP unit and an RMU will need to be defined. A component of the TA could include a review of the institutional arrangements and the associated funding requirements for a PDF and risk management framework. As part of this program, assistance could potentially be provided to help develop an independent infrastructure arbitration agency within Cambodia.

ADB and/or AFD can consider providing TA and/or a loan for the establishment and operation of a PDF. A PDF is seen as a key mechanism for catalyzing the implementation of PPPs, and provides government agencies involved in PPPs with a mechanism for "learning by doing." The experience gained from implementing pathfinder projects can then be used to help refine the provisions in the sub-decree for the implementation of the LOC and, if necessary, identify areas of reform that might be beneficial to strengthen the law itself. Once established, the PDF can potentially be financed by multiple donor agencies.

ADB and/or AFD could provide the government with assistance to develop an infrastructure guarantee facility (IGF) to administer the provision of government support and the associated PPP risk management framework. An IGF is an institution linked to the MEF through which private sector advisors can be recruited to help it manage PPP-related risks following international best practice. An IGF can also be used as a mechanism to facilitate the financial participation of international financial institutions to provide credit enhancement support to PPP projects that complements government support mechanisms and enhances project bankability.

ADB and/or AFD could provide the government with assistance through its public and private sector windows to scale up its PPP operations through the creation of a viability gap fund (VGF), land acquisition fund (LAF), and/or infrastructure financing facility once the basic PPP model has been established and proven. These institutions could play a central role in catalyzing private investment, particularly in sectors such as health and education, which tend to require higher levels of government support to ensure they both meet the requirements of the public sector, and are bankable for the private sector.

Next Steps

It is proposed as an initial step that ADB and/or AFD prepare a strategy paper for the government that is based on a review of the policy framework for facilitating private sector participation in infrastructure, and identify the role of various modalities such as PPPs. The paper could elaborate on the findings and conclusions presented in this joint assessment report, and provide a road map detailing how instruments such as PPPs can be integrated into the government's planning and budgeting process, and operationalized over the medium term. It is proposed that the basic contents of the proposed strategy, as well as the findings of this PPP assessment, will be discussed in a series of workshops with all key stakeholders in 2012.

Appendix 1

Persons Contacted

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AFD, Cambodia

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Secretary of State for the Ministry of Economy and Finance (MEF)
Hang Chuon Naron, Secretary of State (Deputy Minister), MEF, and
Permanent Vice-Chairman of the Supreme National Economic Council
Vongsey Vissoth, Secretary General, Ministry of Economy and Finance
Pen Thirong, Director, Department of Investment & Cooperation, MEF
An Sophanara, Deputy Secretary General, Cambodia Investment Board,
Council for the Development of Cambodia

Sun Chanthol, Senior Minister and Second Vice Chairman, Council for the Development of Cambodia

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Appendix 2

Review of the Private Participation in Infrastructure Policy Framework

Scope of Private Participation in Infrastructure

Private participation in infrastructure (PPI) is defined in the policy paper as the transfer of a significant degree of investment, management, and/or operating risk from the public to the private sector.¹ The forms that PPI may take include, but are not limited to, concessions, leases, management contracts, operating contracts, sales of existing assets, and new build "Greenfield" developments, including joint ventures between public and private organizations. Infrastructure is defined, for the purposes of the policy, as the electricity supply, water supply and sanitation, telecommunications, and transport (airports, seaports, highways, and railways) sectors.

Guiding Principles of Private Participation in Infrastructure

The main objective of the PPI policy is to improve the governance of PPI project transactions, and maximize the extent of PPI in Cambodia and value for money (VFM) achieved by Cambodia. The policy is based on the following guiding principles:

- (i) Responsibility. The roles of each public entity will be clearly defined so that there is no uncertainty about who is responsible for each step.
- (ii) Accountability. Each responsible party will follow prescribed procedures with provision made for the rapid resolution of disputes.
- (iii) **Predictability**. The procedures will have clear guidelines and criteria so the outcome of each step is not subject to arbitrary or political decisions.
- (iv) **Transparency**. The rules and procedures will be followed in an open and fair manner and the necessary information will be made available to all.

Implementation of Private Participation in Infrastructure

The PPI policy is implemented through a set of rules and procedures that define the PPI process. The key objective of the policy is to achieve fairness, transparency, and competitiveness in PPI procurement, to ensure that investors can earn a reasonable return on their investments and users and the Government of Cambodia can maximize VFM through private provision of infrastructure services. The policy seeks to meet this objective by defining clearly the responsibilities of various government entities involved in procuring PPI projects, so they can be held publicly accountable, thereby building

¹ This review is prepared based on material presented in "Public–Private Partnership in Infrastructure Development in Cambodia, A Presentation," sourced from UNESCAP.

confidence that PPI is undertaken in a manner that is consistent with the public interest. The policy provides a framework for enhancing predictability through each stage in the process of procuring and implementing a project, thereby reducing uncertainty in the outcome of each step. This will reduce investors' perceptions of the risks they face, and have the beneficial effect of lowering costs and improving VFM.

The policy is implemented in accordance with the following detailed principles:

- (i) PPI projects provide infrastructure that meets a demonstrated demand. As far as possible, planning of projects should be demand driven.
- (ii) PPI projects must be able to demonstrate that they offer maximum VFM.

The promoters for the projects are

- (i) the government contracting authority (GCA),
- (ii) the responsible line ministry, and
- (iii) the Council for the Development of Cambodia (CDC).

For smaller-scale projects, the promoters may also include provincial and municipal authorities or commune/sangkat councils.²

Government Contracting Authority

The GCA is the entity defined in Cambodian law as being responsible for the delivery of the project-related infrastructure services. It is responsible for developing and awarding a PPP project, signing the contract with the selected private sector developer, and monitoring compliance with the contract terms. The GCA for a particular PPI project can be the responsible line ministry, a para-statal entity such as a state-owned enterprise (SOE), or a provincial or municipal authority.

Each PPI project will have a single GCA, even where projects cross sector boundaries, or where the delivery of some of the infrastructure services under the project is defined in Cambodian law as being the responsibility of one government entity and the delivery of other infrastructure services under the same project is defined in Cambodian law as being the responsibility of another government entity. In such cases, the entities will agree which party should act as the GCA. In the case of disputes, the decision on the GCA will be taken by the Council of Ministers (COM). The role of the GCA involves the following functions:

- (i) define specific PPI projects, thereby moving the project concept in the relevant sector infrastructure plan to a project specification for Cambodia;
- (ii) ensure PPP projects are awarded through a competitive and transparent process that includes the publication of contracts;
- (iii) ensure risks are allocated to those parties best able to manage them, and rewards to investors reflect the risks assumed by them;
- (iv) encourage PPI where the public interest and infrastructure users are protected;
- (v) ensure governance procedures are appropriate for large projects, while not overburdening developers of small rural infrastructure projects; and
- (vi) minimize public sector obligations under PPI projects by increasing certainty for investors and improving the predictability of project revenues.

² Municipal council.

Roles and Responsibilities

Overview

A key part of the policy is the definition of roles and responsibilities in the PPI process so they can be allocated to the appropriate entity, removing confusion and improving accountability. If responsibility is unclear, competition can arise between agencies of government for the authority to enter into a contract for a particular PPI project. These outcomes work against the interests of the users of infrastructure services, the public interest, and the economic interests of Cambodia as a whole, by delaying the project and deterring investors who may be concerned about the legality of the award of the contract. To avoid these circumstances, the roles and responsibilities within government are divided between two groups:

- (i) promoters and sponsors: the entities that develop and promote the PPI project and who may become the parties to the PPI; and
- (ii) checks and balances: the entities that ensure that the balance of costs and benefits between service users, the government, and the private sector is fair and reasonable, and that the procurement process has been undertaken transparently and is consistent with the relevant laws and regulations.

Promoters and Sponsors

Overview

The promoters and sponsors are responsible for performing the following tasks:

- (i) consult with service users and identify the wider public interest;
- (ii) seek approvals-in-principle to proceed from the line ministry, the Ministry of Economy and Finance (MEF), the National Assembly, and others;³
- (iii) issue a public notice of the PPP project opportunity;
- (iv) prepare and issue the request for proposals (RFP) for the PPP project;
- (v) receive and evaluate bids and select the preferred bidder according to criteria included in the RFP;
- (vi) negotiate the contract with the preferred bidder;
- (vii) obtain "no objection" from government entities to negotiate a contract where required;
- (viii) coordinate with the CDC to obtain the various secondary approvals required for the PPI project;
- (ix) sign the final contract with the private sector developer;
- (x) approve the consumer charter prepared by the private sector developer, together with the sector regulator where applicable; and
- (xi) monitor compliance with and enforce the obligations of the private sector counterpart with respect to the contract.

For very large or strategically important projects, the GCA may establish a temporary project-specific inter-ministerial committee to assist in coordinating the approvals process.

Line Ministries

The line ministries with responsibility for the infrastructure sectors within the scope of the PPI policy include the

- (i) Ministry of Post and Telecommunications (MPTC);
- (ii) Ministry of Industry, Mines and Energy (MIME);
- (iii) Ministry of Public Works and Transportation (MPWT); and
- (iv) State Secretariat of Civil Aviation (SSCA).

Line ministries are responsible for preparing plans for infrastructure development and identifying PPI opportunities in sectors that are consistent with their responsibilities as set out in Cambodian law. The role of each line ministry, with respect to PPI projects in its sector, involves the following functions:

- (i) prepare and publish infrastructure policies defining the overall needs of the sector, priorities and types of projects;
- (ii) identify specific infrastructure needs and PPI opportunities consistent with these policies;
- (iii) prepare statements of PPI opportunities to be provided to the publication, including any opportunities submitted by provincial or municipal authorities;
- (iv) provide support to provincial and municipal authorities in PPI project planning and implementation; and
- (v) review unsolicited bids for consistency with the sector infrastructure policy and identified needs and ensure the projects are subject to the correct degree of competition in accordance with the policy for unsolicited bids.

Council for the Development of Cambodia

The CDC is responsible for promoting, facilitating, and registering PPI projects, in accordance with its duties under the Law on Investment and the Law on Concessions. The role of the CDC is to act as a one-stop shop for prospective PPI project developers by

- (i) promoting potential PPI project opportunities in Cambodia to private sector investors and operators;
- (ii) maintaining and publishing a list of proposed PPI projects, either identified by line ministries or in unsolicited proposals received directly from potential investors, showing the current status of each project;
- coordinating between ministries, other government agencies and authorities, donor countries, and international organizations, with respect to the PPI policy and process;
- issuing and updating registration certificates for PPI projects in accordance with its responsibilities under the Law on Investment;
- (v) coordinating with the relevant ministries, agencies, and authorities to obtain the various secondary approvals (licenses, permits, and authorizations) necessary for each PPI project;
- (vi) providing support and capacity building to ministries and other government agencies and authorities involved in the PPI process; and
- (vii) assisting contracting authorities in engaging external advisors for PPI transactions where necessary, including coordinating funding with the MEF.

Provincial and Municipal Authorities

Provincial and municipal authorities assume some of the responsibilities of line ministries and contracting authorities for smaller PPI projects located within their province or municipality. Provincial and municipal authorities may, at their own discretion, propose PPI opportunities located within their province or municipality for inclusion in the statement of PPI opportunities prepared by the relevant line ministry. In doing so, these authorities will coordinate with and benefit from support from line ministries. For PPI projects located in their province or municipality, provincial and municipal authorities may act as the GCA if the value of this project is below the appropriate threshold as defined in the Sub-Decree on Implementation of the Law on Concessions. In these instances, the line ministry responsible for the relevant infrastructure sector will need to acknowledge the authority to contract at the provincial or municipal level.

Commune/Sangkat Councils

Commune/Sangkat councils assist provincial and municipal authorities in identifying small-scale PPI opportunities and in monitoring contract compliance, in accordance with the wider decentralization program of the government. Commune/Sangkat councils assist provincial or municipal authorities in identifying infrastructure requirements and PPI opportunities located within their jurisdictions and which are designed to provide service to the local community. Where appropriate, the provincial or municipal authority may include these in the statement of PPI opportunities provided to the relevant line ministry. Commune infrastructure that is to be developed as a PPI project will be included in the commune's development plan, and the associated capital revenues and expenditures will be included in the commune's budget.

Checks and Balances

Overview

The agencies providing checks and balances for PPI projects are the

- (i) MEF,
- (ii) National Assembly,
- (iii) COM.
- (iv) National Audit Authority (NAA), and
- (v) sector regulator (where applicable).

Ministry of Economy and Finance

The MEF is responsible for assessing and approving the liabilities of the government under proposed PPI projects. The role of the MEF involves the following functions:

- review the impact on government finances of proposed PPI projects and provide approval-in-principle, return for amendment, or reject the proposed PPI project if the impact on government finances is considered to be unsustainable;
- (ii) submit proposed PPI projects to the National Assembly for approval or rejection where these involve a government guarantee;
- (iii) review final contract documentation for consistency with previously granted approval-in-principle and notify "no objections" if satisfactory;

- (iv) provide adequate budgetary funds to allow line ministries and other agencies and authorities to fulfill their functions under the PPI process; and
- (v) ensure that GCAs have sufficient funding to hire external advisors for PPI transactions, either from the annual budget or, together with the CDC, from funding from donor countries or international organizations.

National Assembly

The National Assembly is responsible for approving the award of government guarantees for PPI projects. A general objective of this policy is to reduce reliance on government guarantees for PPI projects by strengthening the legal and contractual framework within which these projects operate. However, guarantees may sometimes be required for individual PPI projects. In such cases, the National Assembly will review and then approve or reject applications for government guarantees following submission of the requirements for guarantees from the MEF.

Council of Ministers

The COM is responsible for coordinating the development of infrastructure policies across Line Ministries. The role of the COM involves the following functions:

- (i) review and approve infrastructure policies developed by individual line ministries, ensuring consistency between them and across sectors;
- (ii) resolve inter-sector disputes between line ministries, including designating the contracting authority for multi-sector PPI projects; and
- (iii) give approval for every large PPI project exceeding the threshold defined in the Sub-Decree on the Implementation of the Law on Concessions, to ensure that they are consistent with the policy of the government.

National Audit Authority

The NAA is responsible for assessing and advising on whether PPI projects offer maximum VFM and for ensuring compliance of PPI projects with Cambodian law. The role of the NAA involves the following functions?

- perform an independent audit of PPI projects, including all those awarded at the national level and a sample of those awarded at the level of provincial or municipal authorities, in order to report on whether the contracts are delivering VFM;
- (ii) recommend changes in the PPI process and procedures where these audits identify deficiencies or means to increase the VFM of PPI projects;
- (iii) recommend appropriate legal action where audits discover breaches of Cambodian law in relation to a PPI project in accordance with the law on the NAA; and
- (iv) publish the results of all audits and any resulting recommendations or actions, in accordance with the law on the NAA, and subject to restrictions on revealing commercially sensitive information.

Sector Regulators

Sector regulators have varying responsibilities for PPI projects, depending on their powers and duties under the sector-specific legislation establishing the regulator. The Electricity Authority of Cambodia (EAC) has been established as the independent regulator of the electricity sector. Independent regulators may be established in Cambodia in the future for other infrastructure sectors. Depending on the relevant legislation, the role of sector regulators involves these functions:

- review contracts for PPI projects, including providing comments on contract documents where documents overlap with regulatory responsibilities, and giving "no objections" to final negotiated PPI;
- issue rules and reference prices for benchmarking of bids where this approach is applied for small-scale PPI projects;
- assess license applications for PPI projects and issue licenses where all requirements are met, assisting developers by publishing the technical and financial standards required of licensees, and provide draft licenses to be included in RFP documents;
- approve tariffs and user charges for PPI projects, where required by law or under the contract for the PPI project⁴; approve the consumer charter prepared by the private sector developer, together with the GCA; and
- monitor compliance with and enforce license conditions, and assist the contracting authority in monitoring compliance with contract terms.

The Private Participation in Infrastructure Process

This policy sets out the key stages and functions in the procurement implementation process for PPI projects. These fall into four major phases:

- (i) Planning and policy: planning the needs for the sector and identifying projects
- (ii) Selecting the investor: selecting the private company to carry out the project
- (iii) Awarding the contract: negotiating with the preferred bidder, awarding the contract, and implementing the project
- (iv) Monitoring performance: monitoring the performance of the contractor and service delivery

Sector regulators should also publish tariff principles and methodologies either separately or as part of RFP documents issued by the GCA.

Appendix 3

Scope of a Law on Concessions: International Best Practice

Concession agreements should accompany all public–private partnerships (PPPs) entered into for the purpose of financing infrastructure and natural resource projects.¹ Concession agreements define the legal relationship between host governments and private partners in infrastructure projects. These agreements typically involve three principal interested parties:

- (i) the government;
- (ii) the private contractor (usually a consortium of construction and other companies with requisite technical expertise); and
- (iii) the contractor's financiers (which may include private sector banks and international financial institutions, export credit agencies, and other institutions).

Laws on concessions (LOC) usually pursue three main objectives:

- (i) setting out the parameters of the host government's authority for concluding concession agreements;
- (ii) establishing the agency or agencies within the host government authorized to conclude concession agreements and its coordination with other government authorities involved; and
- (iii) providing guidance for the negotiation of actual concession agreements.

As concession agreements frequently involve international consortia and financiers, the negotiation requirements of such agreements and the attendant costs are reduced by reflecting internationally recognized best practice. The LOC should focus on essential requirements, and not overly constrain parties in designing arrangements to reflect the requirements of individual projects and prevent the realization of the full potential of PPPs. As such, the LOC should not be overly prescriptive. The LOC is concerned with defining the eligible sectors, eligible government contracting agencies (GCAs), the powers of GCAs to enter into concession agreements, the procedures for the selection of contractors, the content of concession agreements, and related matters such as security interests and dispute resolution.

PPPs are typically financed on the basis of a security arrangement in favor of third-party lenders, which involves a contractor giving security (collateral) over its rights (including

¹ The discussion presented in this Appendix is based on material drawn from the "Legislative Guide on Privately Financed Infrastructure Projects" (United Nations, New York, 2001) prepared by United Nations Commission on International Trade Law (UNCITRAL, and subsequently summarized by the OECD in its publication, *Basic Elements of a Law on Concession Agreements* (OECD, 2003).

rights to receive payments) under a concession agreement. This security is of little value if project lenders do not also have contractual assurances from the government that, if they needed to enforce the security, appropriate procedures can be followed. These procedures would allow the concession to continue and permit the lenders to "step-in" to the concession agreement causing it to be performed in a manner which enables their investment to be realized. Typically, these "step-in" procedures would also be invoked by the GCA where it had the right to terminate the concession agreement.

GCAs should agree in the contract the dispute settlement procedures and provisions, including international arbitration, "as suited to the needs of any project which is the subject of a Concession Agreement." It is important, if international funding is to be attracted, that GCAs should not be forced by law to accept only domestic dispute resolution (whether courts or arbitration). The LOC should also contain a "stabilization clause" which permits GCAs to enter into binding commitments on behalf of the government which protects contractors against financial consequences of future legislation provided specific limitations are observed (e.g., the financial consequences must be "clearly and precisely described"). The following section provides a summary of the scope of an LOC that reflects international best practice.

Scope of the Law

Definitions

For the purposes of the LOC, the contract and the contractual parties should be defined:

- (i) **Government**. This refers to the government in the host country that administers the LOC.
- (ii) Concession agreement. This means an agreement issued under the LOC pursuant to which a GCA grants rights and agrees to the obligations to be undertaken by the contractor in relation to the construction, refurbishment, or provision of infrastructure, and/or the exploration for and/or exploitation of natural resources in exchange for the right to charge a price, either to the public or to a public authority, for the use of the infrastructure facility, or for the services it generates.
- (iii) Government contracting authority. This means [name, individually or by class, relevant authorities] acting on behalf of [], which is responsible for (a) negotiating the terms of the concession agreement, and (b) implementing the terms of the concession agreement, including monitoring of performance under the concession agreement.
- (iv) **Bidder**. This means any person interested in making a proposal in relation to a proposed concession agreement. Both foreign and domestic investors should be entitled to bid for the concession.
- (v) Contractor. This means the entity or entities other than the GCA which is party to the concession agreement. Both foreign and domestic investors should be entitled to enter into any contractual relations under the LOC and have the same necessary rights of a person in the host country.
- (vi) **Designated loan financing**. This means any financing agreement or arrangement (including any refinancing) relating to the financing of work (including services).

Eligible Types of Agreements

The term concession, as used in the law, covers legal instruments such as "concession," "franchise," "licence," or "lease." Concessions can include instruments such as buildoperate—transfer (BOT) and build—own—operate (BOO), and various other forms of related instruments. These instruments provide an entity other than a government authority with the right to provide public services on behalf of the government under the terms of a concession agreement. A "concession agreement" means an agreement between the GCA and the contractor selected to carry out the project for a defined period of time that sets forth the terms and conditions for the construction or modernization, operation, and maintenance of the infrastructure.

Eligible Sectors

The LOC can cover projects in the following non-exhaustive list of sectors: (i) electricity, (ii) water and wastewater, (iii) sewerage and sewage treatment, (iv) waste treatment and disposal, (v) transport (roads, bridges, tunnels, ports, and rail), (vi) health, (vii) education, (viii) telecommunications, and (ix) natural resources.

Eligibility and Powers of Contracting Authorities

GCAs eligible to issue concession agreements should be identified at the national, provincial, and local levels. GCAs should be capable of being jointly empowered to award concessions beyond a single jurisdiction. GCAs should have the power to enter into concession agreements with any person or persons and to enter into ancillary or related agreements, including for the purpose of facilitating any related financing. GCAs shall have the authority, with approval of the government, and subject to the laws of the country, to provide the contractor with government financial support and/or guarantees of the GCA's proper fulfillment of its obligations.

Procedures for the Selection of Contractors

General

The contractor will be selected in accordance with the government's procurement laws and the provisions set out in the LOC. Bidders must be treated fairly and without discrimination.

Pre-Selection Procedures for Competitive Bids

The GCA should publicly announce it is interested in receiving proposals for the proposed concession agreement and publish an advertisement [in the Official Gazette]. Bidders should be required to demonstrate they meet the criteria for pre-selection that are made available to the bidders. Criteria may include the provision of evidence by bidders that they have:

(i) adequate professional and technical qualifications, equipment, and other facilities for all phases of the activity to be undertaken under the proposed concession agreement;

- (ii) adequate financial resources for all phases of the activity to be undertaken under the proposed concession agreement; and
- (iii) appropriate managerial and organizational capability.

If only one bidder meets the pre-selection criteria, the GCA should follow the procedure set out below for noncompetitive bids (section 6). Once the GCA has determined which bidders satisfy the criteria for pre-selection, it should draw up a list of those bidders who will be invited to submit proposals.

Procedures for Requesting Proposals from Bidders

Where it is practicable to formulate sufficiently detailed and precise project specifications, output requirements, or contractual terms for inclusion in a request for detailed proposals, the GCA shall request the prequalified bidders to submit detailed proposals.

If the GCA determines it is not practicable to formulate sufficiently detailed and precise project specifications, output requirements, or contractual terms for inclusion in a request for detailed proposals, the GCA shall request the bidders to submit detailed initial proposals in relation to the output specifications and other relevant characteristics for the project, including the proposed contractual terms, as appropriate.

The GCA shall supply all bidders with the same information on which to base their detailed proposals. The manner in which such information is supplied shall be determined by the GCA, but it shall be supplied in the same manner to all bidders. All bidders shall receive the same information in relation to the procedure to be followed and any related requirements, including when detailed proposals must be made. All bidders shall be given the same period of time to submit proposals.

The request for detailed proposals shall include at least the following:

- (i) project specifications and output requirements, as appropriate, including the GCA's requirements regarding safety standards and environmental protection;
- (ii) an indication of the contractual terms proposed by the GCA; and
- (iii) criteria for evaluating and comparing the technical, financial, and commercial content of the proposals and the manner in which the criteria are to be applied in the evaluation of proposals.

The GCA shall determine the manner in which proposals are submitted and considered and any related requirements. The GCA may convene meetings with bidders for the purposes of clarification or addressing questions regarding the detailed proposals as the GCA determines to be appropriate.

The procedures for the submission and consideration of proposals shall be published [in the Official Gazette].

The GCA may modify its requirements or any part of them and request proposals to be made on the basis of those modified requirements if such a request is made at a reasonable time prior to the time for submission of proposals or if the time for submission of proposals is extended for a reasonable period.

The GCA shall determine what principles, if any, should apply as to whether any proposal should be regarded as noncompliant.

Evaluation Criteria

The criteria for the evaluation and comparison of technical proposals may include the following:

- (i) technical soundness.
- (ii) operational feasibility,
- (iii) quality of services and measures to ensure their continuity,
- (iv) environmental protection, and
- (v) social and economic development potential offered by the proposals.

The criteria for the evaluation and comparison of the financial and commercial proposals may include the following:

- (i) the present value of the proposed amounts to be charged by the contractor under the concession agreement;
- (ii) the present value of any payments to be made by the GCA under the concession agreement;
- (iii) the present value of any payments to be made by the contractor under the concession agreement;
- (iv) the costs for design and construction activities, annual operation and maintenance costs, and present value of capital costs;
- (v) the extent of financial support, if any, expected from the GCA or any other public sector entity;
- (vi) the soundness of the proposed financial arrangements and the acceptability to the GCA of any documentation relating to the proposed financial arrangements; and
- (vii) the extent of acceptance of the proposed contractual terms and any conditions related to such acceptance.

The criteria for the selection of the bidder or bidders, as the case may be, shall be determined by the GCA, taking into account the objectives to be achieved by the proposed concession agreement and all relevant facts, including proposals that have been received. Such criteria shall be applied by the GCA fairly and without discrimination as among all bidders. The GCA shall determine to what extent to make available to bidders details of the criteria, but it shall ensure that all bidders receive the same information in relation to the criteria.

Selection of Bidder or Bidders

In accordance with procedures already published, the GCA shall rank proposals received from bidders in accordance with the evaluation criteria and invite for final negotiation the bidder that has obtained the highest rank. In addition to the bidder that has obtained the highest rank, the GCA may also invite for final negotiation the bidder that has obtained the next highest rank.

The GCA may, at any time, cease negotiations with any bidder and invite other bidders, in the order of their ranking, to enter into negotiations for the award of the concession agreement. The GCA shall ensure that the bidder or bidders, as the case may be, are aware of the manner in which negotiations for, and signing of the concession agreement shall be concluded.

The GCA shall be authorized to make such arrangements as may be appropriate to finalize contractual terms regarding the concession agreement and any ancillary documentation, provided that all bidders are treated fairly and without discrimination.

Award of Concession Agreements without Competitive Procedures

A GCA may enter into a concession agreement without using the procedures described in the foregoing sections of this LOC in the following situations:

- (i) where there is an urgent need for ensuring continuity in the provision of a service, and engaging in a competitive selection procedure would be impractical;
- (ii) in the case of concession agreements where the anticipated present value of amounts to be charged by the contractor, payments to be made by the GCA, or payments to be made by the contractor under the concession agreement do not exceed [];
- (iii) where the concession agreement relates to matters involving national security;
- (iv) where there is only one source reasonably capable of providing the service or facility required pursuant to the concession agreement;
- (v) where a competitive tendering procedure has already been followed but no satisfactory applications or proposals were received, and in the opinion of the GCA the use of a further competitive tendering procedure would not result in the award of a concession agreement; and
- (vi) where the entering into of the concession agreement is consequent upon the default of a contractor and the transaction is with a different contractor who has been invited (pursuant to rights contained in the concession agreement entered into with the defaulting contractor or related documents) to enter into the concession agreement by banks or other financial institutions who have advanced loans to the defaulting contractor and one of the principal purposes for the transaction is to enable such loans to be discharged from revenues which would be paid to the new contractor [step-in rights].

Where the GCA intends to award a concession agreement pursuant to this article, it shall:

- (i) publish [in the Official Gazette] notice of its intention to make the award together with the reasons for making the award; and
- (ii) take such steps as it deems to be appropriate to secure the best value for money from the contractor, taking into account all relevant factors, including the degree of risk to be assumed by the contractor, provided that it does not publish information which it deems to be adverse to the interests of national security.

Notice of Award

The GCA shall cause notice of the award of any concession agreement to be published [in the Official Gazette]. The details to be published shall include the name of the contractor and a summary of the principal terms of the concession agreement (but shall not include any information which is confidential to the contractor).

Review of Project Award and Validity of the Concession Agreement

The government shall have the power to review the selection procedure and the contract documentation for any concession agreement and to certify that the procedures provided for in this Law as well as any other relevant legislation of (the *enacting State*) have been complied with and the concession agreement has been validly entered into. This provision shall not affect or limit:

- (a) any provision in any concession agreement relating to termination or otherwise concerned with the consequences of any impropriety or defect in the procedure for the award or entering into of any concession agreement, or
- (b) any liability of any person or persons for any wrongful act relating to the award or entering into of a concession agreement.

Contents of Concession Agreements

The terms of any concession agreement shall be a matter for negotiation. Nothing in the LOC shall restrict the power of the GCA to agree to an amendment to the concession agreement if it is in the public interest to do so.

Elements of the Agreement

The concession agreement shall, unless the GCA determines otherwise, contain provisions, among other things, on the following matters:

- (i) the nature and scope of works to be performed and services to be provided by the contractor;
- (ii) any conditions precedent to the entry into force of the Concession Agreement;
- (iii) the duration of the concession agreement;
- (iv) the degree of exclusivity;
- (v) the nature of the property interests of the parties in real and personal assets which are to be constructed or provided (if any) or which are the subject of any works or services to be provided pursuant to the concession agreement;
- (vi) the date or dates by which any works have to be completed;
- (vii) such restrictions or conditions as may be agreed on the transfer of a controlling interest in the capital of a contractor;
- (viii) any payments that the GCA is required to make in consideration for services provided or work done by the contractor;

- (ix) the obligations, if any, of the contractor to ensure continued and nondiscriminatory access for third parties to the facility and/or services provided pursuant to the concession agreement;
- (x) the rights, if any, of the contractor to charge third parties for services provided pursuant to the concession agreement;
- (xi) methods for the adjustment of payments due to the contractor by the GCA or by third parties;
- (xii) the rights of the parties to assign their rights, whether by way of security or otherwise, and any conditions applicable thereto;
- (xiii) any requirements concerning guarantees of performance that the contractor may be required to provide or any insurance policies that the contractor may be required to maintain in connection with the construction or the operation of the facility;
- (xiv) the obligations of the contractor, if any, relating to the protection of the environment;
- (xv) the obligations of the GCA to provide land and/or other facilities;
- (xvi) any rights of the GCA to monitor the performance of the contractor's obligations, including the GCA's rights to inspect the relevant facilities;
- (xvii) the circumstances under which either party may terminate or seek renegotiation of the concession agreement;
- (xviii) any payments required to be made by either party to the other or for any reason other than as consideration for works or services;
- (xix) remedies available to the GCA and the contractor in the event of default by the other party;
- (xx) the circumstances under which the GCA or a designated third party may (temporarily or otherwise) take over the operation of the facility or any other function of the contractor for the purpose of ensuring the effective and uninterrupted supply of services or goods which are the subject of the concession agreement in the event of serious failure by the contractor to perform its obligations;
- (xxi) taxation and fiscal matters;
- (xxii) the relationship between the concession agreement and other relevant agreements;
- (xxiii) any applicable provision on force majeure and the consequences of changes in law;
- (xxiv) governing law;
- (xxv) the settlement of disputes; and
- (xxvi) in relation to natural resources, provisions, among other things, on the following matters:
 - (a) a description of the geographical area covered by the concession agreement;
 - (b) the determination of and provisions for the payment of royalties and other fees payable or for the quantities of product shared by the contractor;
 - (c) ownership rights in relation to the relevant natural resources; and
 - (d) arrangements regarding marketing and sale of the relevant natural resources.

Security Interests

The contractor may create security over its rights to any payments of any kind received or receivable by it pursuant to or in connection with a concession agreement without prejudice to its right to create security over any other part of its property.

Settlement of Disputes

The GCA shall have the power to agree to dispute settlement procedures and provisions regarded by it and other relevant parties as suited to the needs of any project which is the subject of a concession agreement, including international arbitration.

Stabilization Clause

A GCA is authorized to enter into a binding commitment on behalf of the government which shall have the effect of providing appropriate assurances in favor of the contractor that it will be protected against the financial consequences of legislation which becomes effective after the date of the concession agreement subject to the following limitations:

- (i) the financial consequences must be clearly and precisely described,
- (ii) the commitment shall terminate upon the termination of the concession agreement, and
- (iii) the nature of the legislation must be described.

Appendix 4

Public-Private Partnership Framework: International Best Practice

Overview

International experience has highlighted the need for the following key institutions to provide an effective framework for implementing successful public–private partnership (PPP) programs:

- (i) National committee for PPP infrastructure development. This provides highlevel institutional direction and support for PPP development and management across multiple sectors and procurement models.
- (ii) **Central agency.** This coordinates investment promotion and issuance of licenses to PPP projects in a transparent and efficient manner.
- (iii) PPP unit. This must have clear responsibilities to act as a single window to coordinate project preparation, transaction, and management within government.
- (iv) Risk management unit (RMU). This agency within the Ministry of Economy and Finance (MEF) coordinates government support arrangements for PPP projects, allowing timely and appropriate decisions to be made on the level, form, and structure of the state participation and the risk management arrangements for each PPP project.
- (v) PPP cells. Within government contracting agencies (GCAs), these cells act within their sectors/regions of responsibility as the focal points for PPP development, procurement, monitoring, and management.
- (vi) **Project teams**. These are established for each PPP project with appropriate resourcing from the GCA, the PPP unit, line and functional ministries, as well as consultants and transaction advisors.
- (vii) **Procurement Committees**. These oversee and manage the procurement process for each PPP project.
- (viii) Independent Infrastructure Arbitration Agency. This agency should be independent of both the GCA and the private sector concessionaire and have specialist expertise in the area of interpreting concession agreements, and presiding over activities such as tariff adjustments, contract variations, and areas of disagreement, if requested by the parties.

In addition to establishing these PPP-specific institutions, it will be necessary for the government to ensure they are provided with sufficient resources and funding. These resources need to be provided under management arrangements whereby institutions and staff can be incentivized and made accountable for delivering

and managing projects. Funding arrangements within government will potentially be required across the full life cycle of PPP projects and can include the following:

- (i) **Project development facility**. This provides a mechanism to finance the up-front cost of engaging staff and specialist external advisors in the PPP unit and PPP cells within government to develop and manage projects.
- (ii) Government support and risk management facility. This provides investors and financiers with adequate security to commit funds to projects, while ensuring that public sector risks are managed. Government support and risk management can be established through the provision of assistance directly by the MEF, or possibly the establishment of an infrastructure guarantee facility (IGF).
- (iii) Viability gap fund. This, or possibly a land acquisition fund (LAF), can be established to cover the cost of public sector funds contributed to projects to make them commercially feasible.
- (iv) Infrastructure financing facility. This can be established by the government to provide long-term financing to PPP projects.

Many of the costs arising from these funding facilities can potentially be recovered by the government from PPP projects that are successfully tendered, and the use of instruments such as success fees for external advisors, and guarantees fees. The use of cost-recovery fees can act as a powerful incentive for the various parties to focus on projects that have a realistic chance of being implemented, and ensure they are carried through to a successful project outcome.

Role and Functions of a Public-Private Partnership Unit

A substantial number of countries have set up, or are in the process of establishing, a dedicated PPP unit. PPP units are designed to ensure that the government has the necessary capacity to create, support, and evaluate multiple PPP agreements prepared within government. Typically PPP units are established to address a lack of expertise within government to develop and evaluate PPP projects, improve transparency, streamline procedures, improve risk-sharing arrangements, and enhance incentives for staff to prepare projects.

PPP units may control the total number of PPP projects and ensure that proposed projects fulfill specific quality criteria (e.g., value for money, affordability, and appropriate risk transfer). Possible functions can include policy and strategy, project identification, project analysis, transaction management, contract management, and monitoring and enforcement. In some cases, PPP units are also required to approve a project before it can go forward to transaction. PPP units are often established to ensure the separation of policy formulation and project implementation, pooling expertise and experience within government, standardization of procurement procedures, appropriate budgetary consideration of projects, and demonstrating political commitment and trust.

There are three general models of dedicated PPP units that may be established by governments: an independent unit, a single centralized unit located within a finance ministry (or equivalent), or as one or more centralized units arranged by sector. The independent unit may be either a government agency or a commercial venture owned in full or in part by the government. The advantage of an independent unit is that

it is politically independent, but this benefit is offset by the lack of integration with the government's planning and budgeting process and the interface with GCAs. The positioning of a dedicated unit within the ministry of finance has the advantage in that it provides a direct link to other expenditure and capital investment expertise and decision-making processes and it is the most common model used by countries, particularly when establishing PPP programs (e.g., Australia, India, and Singapore). The use of centralized units arranged by sector is the least common model.¹

Role and Functions of a Risk Management Unit

An RMU is required to assess and manage the government's exposure to government support undertakings provided to PPP projects to improve their bankability. Government support is often required for PPPs, as they are based on concession structures that rely upon the use of project finance as a method of financing. Project finance differs from more traditional forms of corporate finance in the sense that financiers seek to establish the creditworthiness of the project company on a "stand-alone" basis, before construction has begun, or any revenues have been generated, and to lend on the basis of that credit. As a result, financing parties must rely mainly upon the project company's cash flows for repayment. If the project fails, they will have no recourse, or only limited recourse, to the financial resources of a sponsor company or other third party for repayment. This financing arrangement makes the identification and quantification of project risks a primary factor determining the feasibility of financing PPPs.

The main categories of project risks are as follows:

- (i) project disruption caused by events outside the control of the parties ("force majeure"),
- (ii) project disruption caused by adverse acts of government ("political risk"),
- (iii) construction and operation risks,
- (iv) financial and commercial risks, and
- (v) exchange rate and other macroeconomic risks.

A key principle of project finance is that specific risks should be allocated to the party best able to assess, control, and manage the risk. Additional guiding principles include the allocation of project risks to the party with the best access to hedging instruments (that is, investment schemes to offset losses in one transaction by realizing a simultaneous gain on another), or the greatest ability to diversify the risks, or to mitigate them at the lowest cost. However, in practice, risk allocation is often a factor of both policy considerations (for example, the public interest in the project, or the overall exposure of the contracting authority under various projects) and the negotiating strength of the parties. Furthermore, in allocating project risks, it is important to consider the financial strength of the parties to which a specific risk is allocated and their ability to bear the consequences of the risk, should it occur.

Most project risks can be regarded as falling within the control of either the public or private sector parties. However, a wide variety of project risks result from events outside the control of the parties, or are attributable to the acts of third parties, and other principles of risk allocation may need to be considered. The parties may use various

¹ OECD. 2010. Dedicated Public–Private Partnership Units, A Survey of Institutional and Governance Structures.

contractual arrangements to allocate and mitigate project risks. Nevertheless, these arrangements may not always be sufficient to ensure the level of comfort required by private investors to participate in privately financed infrastructure projects. In these circumstances, additional government support is needed to enhance the attractiveness of private investment in infrastructure projects.

Government support may take various forms. Generally, any measure taken by the government to enhance the investment climate for infrastructure projects can be regarded as government support. For example, the existence of legislation enabling the government to award privately financed infrastructure projects, or the establishment of clear lines of authority for the negotiation and follow-up of infrastructure projects, may represent important measures to support the execution of infrastructure projects. However, "government support" has a narrower meaning and refers to special measures that may be taken by the government to enhance the conditions for the execution of a given project or to assist the project company in meeting some of the project risks, above and beyond the ordinary scope of the contractual arrangements agreed to between the contracting authority and the project company to allocate project risks. The main forms of government support are as follows:

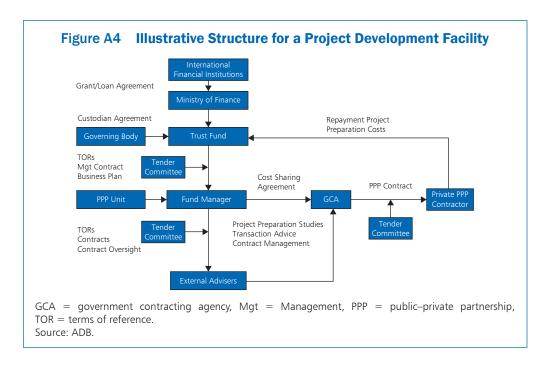
- protection from competition,
- sovereign guarantees,
- output and capital subsidies,
- tax and customs benefits,
- public loans and loan guarantees, and
- equity participation.

Guarantees are the most cost-effective form of government support in economic and financial terms, but also the most difficult to quantify and manage. Governments can provide guarantees for a range of purposes, including offtake arrangements for build-operate-transfer projects, availability of supply of raw materials, and adverse acts of government. Governments can also make use of guarantees sourced from other international financial institutions and export credit agencies, although in most cases the government will have to provide a counter guarantee. It is important for the government to assess and efficiently manage its exposure to project risks and determine the acceptable level of direct or contingent liabilities it can assume. It is essential that the government is not placed in a position where it is exposed to open-ended obligations it cannot meet. This function is performed by an RMU, and it needs to be integrated with the government's other liability management functions in areas such as debt management.

An important issue that needs to be considered when a government provides support to a GCA is moral hazard, and ensuring these agencies bear the full cost of any actions that cause the guarantee to be called for reasons that are within their area of responsibility to manage. To avoid this situation, the RMU needs to enter into back-to-back agreements with the private sector contractor, and the GCA, so that if there is an adverse event on the part of a GCA, the RMU can meet its obligations to the contractor, and recover costs from the GCA. This places the MEF in a cost-neutral position, and creates a strong incentive for the GCA to abide by the terms of the contract. Similarly, the GCA is covered for non-compliance by the private sector contractor, as it is not obliged to make any payments if it does not comply with the terms of the contract.

Role and Functions of a Project Development Facility

A PDF can be established by a government to provide GCAs with a source of funds to prepare and transact projects. PDFs are required as projects can be expensive to develop, and it is more flexible than the fiscal management system to access funds to engage consultants when required. PDFs also provide a transparent mechanism to finance the selection, preparation, and transaction of PPP projects. PDFs can be financed from a government's own fiscal resources, or by accessing funds from multiple external sources such as overseas development assistance from international financial institutions. PDFs can be an efficient source of funding for projects, as the costs of advisory services can be passed onto the concessionaire, who will then recover the costs through the tariff. An important requirement for a PDF to successfully attract external funds is transparent governance arrangements based on a governing board, capable management, transparent procurement arrangements, performance benchmarks, regular reporting requirements, and regular independent audit. An example of how a PDF could be structured is illustrated in Figure A4.



When establishing a PDF, there will be a wide range of issues that need to be considered, including the mechanism for transferring funds from the MEF to the trust fund, the legal structure of the trust fund, the composition of the governing body of the fund, the terms of the contract for the fund manager, the preparation of the business plan, the procurement procedures for engagement of consultants, the contracting arrangements between government agencies, and the requirements for flow of funds between government agencies. Ideally, a success fee should be built into the payment arrangements for the fund manager and the consultants, and this requires a contingent element to be built into the contract, which needs to be accommodated in the fiscal management system. Public sector procurement rules can be an important factor influencing the structure of the PDF.

Appendix 5

Illustrative Screening Criteria for Public-Private Partnership Project Selection

To ensure that the project meets the government's planning requirements and has potential to be structured as a public–private partnership (PPP), the proposed project can be screened, using a mix of threshold compliance criteria, and ranking criteria, that are combined using a multi-criteria analysis (MCA) framework, as illustrated in Table A5.

Table A5 Illustrative Screening and Multi-Criteria Analysis

No.	Criteria				
	Threshold Criteria		Compliance (Yes/No)		
1	Complies with government regulations and planning requirements				
2	Project is a strategic priority that is part of the governing program and it would have significant development impact	ment's			
3	Sufficiently large scale to justify PPP transaction costs (i.e., capex > \$30 million–\$50 million)				
4	Project is in a sector which is in compliance with the government's PPP support framework				
5	Project is capable of being replicated				
6	Government commitment and willingness to provide for project preparation (written confirmation)	support			
	Evaluation Criteria	Weight	Score	Total Score	
1	There are existing plans and studies and data is available on demand, and resource availability				
2	Project need and outcomes have been defined and there is a clear revenue model				
3	Demand likely to be sustained in the future, with strong stakeholder support				
4	There is potential to generate third-party revenues				
5	There are large sunk costs associated with the project that will make financing difficult without some form of government support				
6	Required technology is unlikely to change significantly over the next 10–15 years			on novt page	

continued on next page

Table A5 continued

No.	Criteria			
	Evaluation Criteria	Weight	Score	Total Score
7	Raw material inputs are available to support output production			
8	Land acquisition is feasible and funds are available to implement this activity			
9	Acceptable social and environmental impacts that can be adequately managed			
10	There is potential to define a contract in terms of outputs, as demonstrated by comparable projects			
11	There are opportunities to generate VFM through innovation, competition, and risk transfer to the private sector			
12	Reasonable expectation that the GCA has capacity and can afford to provide administrative and financial support to prepare and manage the project			

GCA = government contracting agency, PPP = public-private partnership, VFM = value for money. Source: ADB.

The MCA can be used to help the PPP Unit screen and rank potential PPP opportunities. Once a list of attractive projects has been identified, they can then form the basis for a business plan that can be used to guide recruitment and management of advisers engaged to prepare the projects, under the direction of the PPP Unit and the GCA project preparation team.

Bibliography

ADB. 2009. Special Evaluation Study: Assistance for Public–Private Partnerships in Infrastructure Development—Potential for More Success. Manila.
2010. Cambodia: Competition Policy in a Transitional Economy. Manila.
2011. Country Partnership Strategy: Cambodia, 2011–2013. Manila.
2010. Private Sector and SME Assessment, Strategy and Road Map: Cambodia 2010–2014. Manila.
2011. Asian Development Outlook 2011. Manila.
Council for Development of Cambodia. 2011. Cambodia Investment Guidebook.
DFDL. 2010. Cambodia Legal and Investment Guide.
Economist Intelligence Unit. 2010. Cambodia Country Report August 2010.
B. Flyvbjerg, N. Bruzelius, and W. Rothengatter. 2003. <i>Megaprojects and Risk: An Anatomy of Ambition</i> . Cambridge, UK: Cambridge University Press.
IMF. Cambodia: 2010 Article IV Consultation. IMF, February, 2011.
International Labour Organization. 2005. Review of Opportunities for Public–Private Partnerships in Cambodia. Phnom Penh: International Labour Office.
T. Irwin and T. Mokdad. 2010. Managing Contingent Liabilities in Public–Private Partnerships, Practice in Australia, Chile, and South Africa. Washington, DC: The International Bank for Reconstruction and Development / The World Bank.
Leopard Capital. Why Invest In Cambodia. www.leopardasia.com/leopard-cambodia/why-invest-in-cambodia.html
OECD. 2003. Basic Elements of a Law on Concession Agreements.
2010. Dedicated Public-Private Partnership Units, A Survey of Institutional and Governance Structures.
Sciaroni and Associates. 2010. Doing Business in Cambodia, December 2010.
World Bank. 2007. Connecting to Compete: Trade Logistics in the Global Economy. Washington, DC.
2009. Sustaining Rapid Growth in a Challenging Environment: Cambodia Country Economic Memorandum. Washington, DC.
2011. Doing Business 2011. Washington, DC.

- UNESCAP. Public–Private Partnership in Infrastructure Development in Cambodia, A Presentation.
- United Nations. 2001. *Legislative Guide on Privately Financed Infrastructure Projects*. New York.
- X. Yang, Z. Wang, Y. Chen, and F. Yuan. 2010. Factors Affecting Firm Level Investment and Performance in Border Economic Zones between the People's Republic of China and its Neighboring GMS Countries. *Journal of Greater Mekong Subregion Development Studies*. 1 (1).

Assessment of Public-Private Partnerships in Cambodia

Constraints and Opportunities

This report is a diagnostic assessment of the readiness of Cambodia to develop and manage public–private partnerships (PPPs). It was prepared jointly with the Agence Française de Développement (AFD), and it is part of a series of studies being prepared by the Southeast Asia Department of the Asian Development Bank (ADB). The study sets out the development strategy context for PPPs, reviews the enabling environment, and provides a gap analysis of current arrangements relative to international best practices. The analysis considers arrangements that can be put in place at the national and subnational levels, and identifies areas where AFD and ADB could provide assistance. The preparation of this assessment is an integral part of ADB's planning process to ensure coordination between the government's priorities and those of ADB, especially as regards ADB's Strategy 2020 and the PPP Operational Plan.

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