





# PUBLIC-PRIVATE PARTNERSHIPS FOR URBAN HEALTH

Guidance for Local Leaders

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## ACRONYMS

ADB	Asian	Develo	oment	Bank
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- BHC Building Healthy Cities
- CSR corporate social responsibility
- IOM International Organization for Migration
- JSI JSI Research & Training Institute, Inc.
- PPIAF Public-Private Infrastructure Advisory Facility
- PPP public-private partnership
- SPV Special Purpose Vehicle
- USAID United States Agency for International Development

#### **Building Healthy Cities**

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## INTRODUCTION

The Building Healthy Cities (BHC) project is funded by the United States Agency for International Development (USAID). BHC engages with sectors that contribute directly or indirectly to urban citizens' health (particularly women's and children's health) and quality of life. These sectors include transportation, the environment, sanitation, education, recreation, technology, and the built environment.

BHC has identified three core values through our work that must intersect for any urban health programming to be successful. Multisector engagement, the first core value of BHC, aims to provide all sector stakeholders with a common understanding of how their work contributes to health. The second core value is to strengthen community engagement in municipal decision-making, while the third is to support use of data for planning and decision-making.

Through its work to encourage urban planning structures based on these core values, BHC has identified a major gap in multisector engagement relating to the private sector. While individual sectors have documented success in developing relationships with private sector actors, there is a gap in the knowledge base about how to develop private-sector relationships for urban health projects, and multisector projects more generally.

This set of briefs, prepared by BHC partner Urban Institute, explores the use of publicprivate partnership (PPP) models to address local urban health issues. This brief is a companion to a more general brief on PPPs and focuses on guidance and examples that may be useful to local government stakeholders in Asian cities. It reviews the PPP landscape in three BHC partner cities: Indore, India; Makassar, Indonesia; and Da Nang, Vietnam with particular focus on PPPs that advance public health outcomes – either directly through hospitals or clinics or through health-affecting projects like water and sanitation or clean public transportation. For more details on what PPPs are, their benefits, their challenges, and how they are used to advance public health outcomes broadly, see the accompanying brief in this series entitled "<u>Public-Private Partnerships for</u> <u>Urban Health: A Primer of the Benefits, Challenges, and Opportunities.</u>"



## BACKGROUND

To help bridge significant funding gaps between public priorities and public resources, some governments are considering engaging private sector resources and expertise. One way to do this is through PPPs. Although initially focused on large infrastructure projects such as roads and airports, the PPP model has been increasingly applied to social sector needs, particularly projects that are complex and costly, including those that affect public health.

PPP arrangements are specific, long-term contracts between a government entity and a private party (or parties) whereby the private partner bears responsibility for delivering an asset or service and, in exchange for the risk they bear, receive payment that is linked in some way to performance (World Bank, 2017b). PPPs are distinct from other forms of private sector engagement, including less formal and shorter-term partnerships.

A PPP project might, for example, see a private partner build and manage a hospital under contract with the government. The contract could set minimum service standards and set aside an allotment of free or price-capped beds for low-income patients. In exchange, the private contractor would be able to charge market-price fees to most patients and receive some level of payment from the public partner.

PPPs are a potentially effective and efficient way to advance important public priorities, however, they are also complex arrangements that are often challenging to launch and manage. Government officials must carefully assess the feasibility of potential PPP projects, including whether the PPP model is the most appropriate way to produce a given good or service and whether the government has the necessary capacities to negotiate and manage such contracts to ensure the maximum public benefit. Other ways to engage the private sector and tap private expertise and resources – such as traditional service contracts, policies that encourage private investment, CSR relationships, or blended finance arrangements – may be more appropriate and suitable for local needs and conditions.

The relatively limited number of PPPs that exist for public health and other social services is perhaps a measure of the complexity of such long-term agreements and their sensitivity to institutional arrangements and other factors. Nonetheless, the potential benefits of the model are significant, as is the broader need to dramatically increase investments in both infrastructure and services to meet the challenges of climate change, demographic shifts, and urbanization. In the absence of well-functioning public debt markets, PPPs may accelerate the financing and completion of investments for many public goods and services. Realizing this potential requires attention to both the transactions and the underlying context for such innovative and complex arrangements.

## GUIDANCE FOR LOCAL LEADERS SCOPING AND BUILDING PPP PORTFOLIOS

Well-designed and managed PPPs offer an opportunity to leverage private financing and technical capacities to advance critical public priorities. However, PPPs are neither simple nor guaranteed to succeed and not all places or projects may be appropriate for this contracting arrangement. In addition, the lack of conclusive evidence about the actual benefits of PPPs points to the importance of focusing on quality rather than quantity (e.g., better PPP projects not just more). Indeed, many projects may be more feasible through traditional public contracting or other forms of private partnerships than through the time-intensive and complex PPP process.

PPP efforts at the city or local level should be pursued in close coordination with national authorities and in particular, any PPP units that exist, because such entities can often provide relevant government expertise and skills and can help coordinate complex approval processes. The functions of these units<sup>1</sup> vary widely and can include providing policy guidance and capacity building, promoting PPPs within and outside government, delivering technical support for implementation, and/or reviewing, approving, or overseeing the management of PPP projects (World Bank, Dedicated PPP Units, n.d.). It should be noted, however, that PPP units are not a cure-all and "will not work well in countries already plagued with severe governance defects affecting standard public works procurement and contracting" such as untransparent and uncompetitive procurement and chronic government incoordination (Leigland, 2018).

Informed by literature and expert interviews, we recommend four steps for local government officials and their partners to take when seeking to explore and build strong PPP portfolios: (1) assess the environment for PPPs; (2) adopt an objective approach to assess the merits of individual projects; (3) use that approach to build a pipeline of projects; and (4) evaluate and build on successes.

## 1. Assess the conduciveness of the national and local environment for PPPs

A conducive enabling environment generally requires:

• A clear and supportive national <u>legal and regulatory framework</u>. While specific legal and regulatory frameworks will vary by country, it is critically important that this structure exists to authorize and govern PPP projects. The framework could include legal rights and obligations for contracting authorities and private entities (beyond what's specified in the PPP contract) as well as specific laws related to public contract and procurement, public financial management, tax, employment, environment, etc. (World Bank, Scope of the PPP Legal Framework, n.d.). The framework helps establish mutual accountability expectations for project partners, sets fundamental conditions for projects, and provides a degree of legal clarity and predictability.

<sup>&</sup>lt;sup>1</sup> PPP units are often housed within ministries of finance or planning or in the Office of the Prime Minister or the President.

Without a clear legal-regulatory framework in place, parties may be reluctant to enter into a long-term agreement and projects may require numerous authorizations, which may increase costs, uncertainty, and risks for investors (Leigland 2018).

- <u>A robust, transparent public procurement system</u>. While PPP projects depart from some standard procurement processes, they build on existing procurement systems including policy frameworks, management capacities, operational practices, and accountability mechanisms.<sup>2</sup> This existing system, as well as the capacity of the responsible implementing agency to manage the contract and the performance of PPP contractors, should be strong enough to facilitate a PPP project that safeguards and advances the public interest. Procurement systems which adopt transparent policies and practices, including the unrestricted disclosure of key documents, are also necessary to ensure that pricing and terms are seen as competitive and legitimate by community members and political leaders. Given the importance of measuring and tracking performance as part of ensuring project partners meet contractual obligations, the public procurement should have the capability of capturing and assessing performance data and incentives to explain to the public how performance meets the original public objectives.
- <u>Trusted venues for dispute resolution</u>. Disputes over contract terms or project management decisions are not uncommon in PPP projects. The existence and accessibility of independent and trusted court or arbitration venues to resolve disputes in a timely and fair manner are important to build confidence, particularly among private service delivery partners and investors. The predictability and speed of such tribunals is important, as is the system of enforcement of judgments, even when the state is a party to the dispute.
- <u>A qualified private sector</u>. PPP projects require qualified private partners including investors with sufficient financial resources as well as providers with technical and management expertise. A well developed and competitive private sector is critical to ensuring private partners have the capacity to deliver (Duc et al., 2012). In order to ensure services or goods generated by the PPP contract meet quality standards, there should be providers with track records of doing just that. Policies should also be in place that enable private sector actors to contribute to public health (e.g., allowing private pharmacies to sell rapid malaria diagnostic tests). While foreign entities (especially as investors) are partners in many PPP projects, local private partners are often also involved.<sup>3</sup>
- <u>Government experience and capacity engaging private sector partners.</u> Some governments have limited direct experience conducting outreach, garnering buy-in, and unlocking resources from private partners. Ensuring key government staff understand the potential value of private sector engagement and have experience

<sup>&</sup>lt;sup>2</sup> To better understand the elements of a strong procurement system, see the Organization for Economic Co-operation and Development Methodology for Assessing Procurement Systems, 2016.

<sup>&</sup>lt;sup>3</sup> Depending on the country, some degree of local private participation in projects may be required by law.

partnering with this sector is important to advance public priorities. Further, governments should have the capacity to collect and use relevant data on private companies' operations and experience, their approaches, and their value add in order to weigh potential partners.

• <u>Clearly defined local authority</u>. Fragmented or unclear authority may undermine local government bodies' ability to plan and implement a PPP. While few local government units will be able to act unilaterally without higher level review and/or approval, countries with numerous layers of bureaucracy may undermine public partner credibility and cause impractical delays in approval and/or implementation.

It is important to note that perfect conditions for PPPs rarely exist. If these conditions do not all exist in a given place, PPPs could still prove desirable and successful, although executing them well will require even more careful planning, intentional transparency, and safeguard measures. If these conditions are not met, and even if they are, local government officials should carefully consider whether the PPP model is the optimal way to advance their public priorities. Traditional public procurement or other, less complex, private sector engagement methods may be more appropriate. In the longer term, local officials can also consider working with national-level offices and development partners to bridge key institutional and capacity gaps.

## 2. Adopt a transparent, objective approach to assess the merits of individual projects

If the enabling environment is supportive, potential PPP projects should be assessed against a set of objective criteria. Based on available literature and existing assessment tools (some of which are provided in the resources section of this document), stakeholders might consider including the following factors in their assessment:

- <u>Compelling and clearly estimated public benefits</u>. Using data, transparent and reasonable assumptions, and a replicable methodology, the government should be able to estimate whether the proposed project has clear economic, social, health, and environmental benefits for the public. For example, private sector engagement through PPPs could benefit the health sector through private provider franchising, risk pooling, social marketing, etc. These benefits can include a range of factors that help address market imbalances, such as increased access and affordability, improved product design or quality, enhanced awareness or education, and more usercentered products or services. Whenever possible, these benefits should be estimated in monetary terms.
- <u>Demonstrated benefit of harnessing private financing</u>. Governments should assess the value proposition of different funding strategies, including both fully public as well as different private sector engagement models, to determine whether a PPP approach makes sense and, if so, to determine which model and contract structure will yield the best public value. This assessment should consider funding gaps and the potential leveraging of public funds to unlock private investment.

- <u>Need for private sector managerial or technical expertise</u>. Due to complexity and/or scale, some projects may require managerial and technical expertise that exceeds, or is more efficient than, resources available within the government. For instance, contracting with the private sector to leverage their logistics, microplanning, supply chain, cold chain, fleet management, or transportation expertise could prove particularly helpful in deploying supplies or vaccines for the COVID response. The PPP model may be an effective way to secure this expertise, but this is not a given.
- <u>Sufficient incentive for private sector to participate</u>. PPPs, unlike CSR funds, require private partners to meet their costs and return a profit. That the private actors will make a profit is an attribute, not a weakness of PPPs. Projects must demonstrate sufficient potential for revenue generation through user fees and/or government subsidies to cover private partners' costs and offer attractive profit potential (Le et al., 2020).<sup>4</sup> While the private partner should be required to take on some risk, such as appropriate cost overruns, there should be sufficient upside potential to attract the private partner. Potential profit is what leads private partners to take on the inherent risks in the project including those related to working with the government and draws their capital and expertise to a public need.
- <u>Shared expectations on risks, contingencies, and roles</u>. Projects should offer some sense of how risks and roles will be assigned from the beginning to assess whether the project is feasible and to help align expectations. Projects that rely on an unrealistic assignment of risk to private partners relative to potential returns, for example, may not make it past the tender phase.
- <u>Limited fiscal liability for governments</u>. One important expected benefit of PPPs is the sharing of financial risk with private partners. Governments should consider whether a proposed project sufficiently limits their financial liability. For instance, governments should identify early on if they are at risk of committing to significant and potentially unsustainable payments. Projects that do not sufficiently limit the fiscal liability for governments should be carefully scrutinized.
- <u>Realistic public commitments</u>. The success of PPP arrangements depends on government partners delivering on specific commitments such as securing and transferring land for the project. The risk of such commitments or the likelihood that the public partner will actually deliver should be carefully evaluated by all parties, with particular attention given to the likelihood of political changes and opposition of specific interests or public opinion more generally.

<sup>&</sup>lt;sup>4</sup> As a reflection on the larger economy, including whether there is a sufficiently large and growing middle class with disposable income, financing models that depend largely on the ability of service users to pay should consider their capacity to do so at a sufficient price point. (Le et al., 2020). This is not to say that PPP projects are only possible in environments with large middle classes. Other resource streams, such as a tax on extractable resources, can also be secured to help finance the project and subsidize service access.

#### 3. Build from this approach to develop a pipeline of strong projects

Government stakeholders should build a pipeline of PPP projects by customizing the criteria as recommended in Step 2 above and then applying those criteria to identify strong projects in priority sectors or that address key target outcomes. Such a strategic approach will help identify the most viable and potentially impactful projects. A dedicated body, such as an advisory committee<sup>5</sup> or office, with dedicated personnel should be tasked with building this portfolio in coordination with the officials who will negotiate contracts and audit performance. Further resources to help governments build their capacity to develop these pipelines are included at the end of this brief.

This process should help officials focus on a list of higher quality projects that are a good fit for the PPP model and are likely to attract private investment. The Philippines, for example, has built a robust PPP pipeline of projects by carefully considering project readiness, responsiveness to sector needs, and likelihood of success (World Bank, Building an Initial PPP Pipeline, n.d.). Once potential projects are identified, they should be made public to stimulate private sector interest, encourage public scrutiny, and facilitate competition as a precursor to tendering bids.

### 4. Evaluate and build on successes

Places with limited public and/or private experience with PPPs should ease into this model by launching a project that appears to be an exceptionally strong candidate for PPP financing, with relatively limited public or private risk but a clear need for private financing and management expertise. For example, a local government could tender a PPP contract for solid waste management with clear contractor performance expectations. By identifying and studying successes and challenges from structuring and managing initial projects, the government can build its PPP portfolio gradually, drawing on lessons learned to refine its strategy.

## PPP LANDSCAPE IN BHC PARTNER CITIES

PPPs are increasingly common at the local level, especially in settings with strong local leadership, access to national PPP supports, rule of law and a clear legal framework, a robust private sector, and sufficient public management capacity for procurement and financial management. Within this section, we briefly examine the landscape for PPPs in three BHC cities and countries to help understand the extent to which these conditions exist. In all three contexts – Indore, India; Da Nang, Vietnam; and Makassar, Indonesia – actual PPP contracts (as defined by this brief and by World Bank, 2017b) are much less common than other forms of private sector engagement, yet the PPP label is sometimes used broadly. These other forms of engagement with the private sector could include conventional procurement of goods and services, donations from private individuals or corporations, or direct investment by private companies.

<sup>&</sup>lt;sup>5</sup> Advisory committee conflicts of interest should be identified, declared, and managed,

These three cities vary in terms of existing PPP efforts, capacities, needs, and opportunities but are all in countries with conducive environments when benchmarked against internationally recognized good practices for PPP preparation, procurement, contract management, and policies for handling unsolicited proposals (see Table 1). Further, all three cities have seen local activity and interest in PPPs.

Table 1. Country and Regional Regulatory Framework Benchmark Scores, 2018 (percent of internationally recognized good practices met: score 1-100)

	India	Indonesia	Vietnamª	South Asia <sup>b</sup>	East Asia and Pacific <sup>c</sup>
Preparation of PPPs	82	63	77	57	40
Procurement of PPPs	72	74	77	65	53
PPP contract management	80	58	62	50	46
Unsolicited proposals	Prohibited	58	25	68	46

Source: World Bank, 2018a

Notes: <sup>o</sup> The new PPP law is expected to improve Vietnam's score in several areas, including unsolicited proposals.

<sup>b</sup> South Asia region is defined as Afghanistan, Bangladesh, India, Nepal, Pakistan, and Sri Lanka

° East Asia and Pacific region is defined as Cambodia, China, Indonesia, Lao PDR, Malaysia, Mongolia, Papua New Guinea, Philippines, Singapore, Solomon Islands, Thailand, Timor-Leste, Tonga, and Vietnam

Review of the PPP landscape in these three countries points to several broad lessons that are consistent with the guidance articulated above:

- PPPs are just one way of engaging the private sector and tapping its resources for public benefit. In many countries including India and Indonesia, potential CSR engagement can draw significant interest at the local level through the transfer of privately funded assets to subnational governments.
- The presence of national PPP policies, legal frameworks, and programs, particularly PPP units to coordinate activities and funding mechanisms like viability gap funds, are important to signal national government commitment and provide critical financial and technical support to ensure worthy projects are commercially viable.
- While important, these national level supports on their own are insufficient to ensure a
  suitable enabling environment for PPPs and encourage sufficient interest and
  confidence in the model. Local and national leaders could consider highly visible
  steps to attract private sector interest and address public concerns, including by
  making commitments to PPP project transparency, outlining detailed plans for
  identifying and advancing viable projects, and articulating the logic behind local PPP
  strategies.

- In most countries, interest in PPPs is still primarily driven by large investment needs in physical infrastructure such as roads and ports. While there is growing interest in health and health-affecting services as well as health infrastructure such as water systems or hospitals, special attention should be paid to balancing the needs of vulnerable users with the commercial viability of the project. A blend of public subsidy and private fees may be appropriate, but contracts should specify service standards, public liability, and risk allocations.
- Poor identification and allocation of risk among project partners remains one of the most significant barriers to advancing projects and, for those that have launched, can undermine success. Accurately estimating risk and then negotiating appropriate risk allocations in project contracts is a challenging undertaking, especially when parties lack adequate expertise to do so.
- PPP projects should not be undertaken in places with weak public financial management and accountability systems. For example, if traditional procurement is slow, opaque, and delivers subpar outcomes, the PPP model is not a good fit and will likely exacerbate these existing issues.

## India

India has a large and vibrant PPP marketplace, particularly for road and energy-related infrastructure projects. According to the World Bank, India was one of the top five emerging or developing economies for investment commitments in infrastructure PPPs over the period from 2000 to 2015 (Ruiz-Nunez et al., 2016). As of 2017, there were over 1,000 active infrastructure PPP projects in India worth at least US\$260 billion (World Bank, 2017a), and PPPs are expected to fund US\$1.5 trillion in infrastructure needs in fiscal years 2021-2025, of which US\$251 billion is for the urban sector (Chakraborty et al., 2020).<sup>6</sup>

The PPP model is expected to play a major role in advancing the Government of India's Smart City Mission. The Smart City effort launched in 2015, is active in 100 cities, and works to boost economic growth and quality of life through local development and use of technology (Ministry of Housing and Urban Affairs, Government of India, Smart Cities Mission; n.d.). One mechanism it uses is the mobilization of privately financed solutions to address municipal challenges, such as by bridging major infrastructure funding gaps by moving away from grants to commercial funding sources (Pratap, 2017). It is worth nothing that there are no systematic, comparable data showing levels of private sector investment in the 100 Smart City Mission Special Purpose Vehicles (SPV) or in the projects that have been financed by the effort, making it difficult to analyze these investments in Smart Cities.

<sup>&</sup>lt;sup>6</sup> The estimates are approximate. They were presented in the source as Rs crore but have been converted to US\$ by the authors using April 2020 conversion rates (the publication date of the source report) of 1 \$US = 0.0131 INR. The urban sector is defined in the Government report as including the "Atal Mission for Rejuvenation and Urban Transformation, Smart Cities, MRTS, Affordable Housing, Jal Jeevan Mission."

The Government of India centralizes coordination of PPPs through a PPP Cell in the Department of Economic Affairs within the Ministry of Finance (Department of Economic Affairs, Government of India, n.d.). This cell provides guidelines and offers resources including a toolkit on structuring infrastructure PPPs in five priority sectors: highways, urban transportation, solid waste management, ports, and water and sanitation. It also has procedures for appraising and approving PPP projects, depending on project size (Department of Economic Affairs, Government of India, n.d.). PPP coordination bodies also exist within government agencies and bring administrative expertise and knowledge of PPP risks to assist in structuring and bidding PPP arrangements. One study from the Indian water and sanitation sector found that active involvement of these bodies through the project lifecycle can help ensure benefits are delivered to stakeholders (Mahalingam et al., 2011).

**Two main national government funding mechanisms support infrastructure PPPs**. The first is a Viability Gap Fund, which covers up to 20 percent of a project's total cost to make worthwhile projects commercially viable. The second is an India Infrastructure Project Development Fund, which covers a portion of transaction costs to increase the number of "credible and bankable PPP projects that can be offered to the private sector." (Department of Economic Affairs, Government of India, n.d.).

Efforts to expand the use of PPPs in India have encountered some obstacles. To date, billions of private sector dollars have been unlocked for PPP infrastructure projects and projects in India fare relatively well on a number of international good practices.<sup>7</sup> At the same time, use of PPPs and adherence to good practices varies across India, driven in part by the wide variation in subnational government capacities to engage in PPP projects. Strengthening the overall PPP context in India will depend on a number of reforms and practices, including improved allocation of risks across PPP parties (Kelkar et al., 2015). One study identified several barriers that urban PPP projects in India face including "a distrust between the public and private sector, a lack of political willingness to develop PPPs, the absence of an enabling institutional environment for PPPs, a lack of project preparation capacity on the part of the public sector, and poorly designed and structured PPP projects" (Mahalingam, 2010). Some experts<sup>8</sup> have observed that progress has stalled or even reversed on enabling environment improvements in recent years, particularly at the local level, which underscores the need for strategic reforms.

There is interest from both governments and private investors in India in using the PPP model to address deficiencies in health service delivery, including both infrastructure and services. This interest has manifested through several initiatives, such as guidelines issued in 2018 by a Government of India think tank (NITI Aayog, Government of India, 2018) on establishing PPPs for non-communicable diseases.<sup>9</sup> However, the evidence about Indian

<sup>&</sup>lt;sup>7</sup> According to one review of energy, telecommunications, transport, and water, sanitation and hygiene PPP projects between 1990-2011, only 1.32 percent of projects were cancelled. This is low compared with neighboring countries (Tiwari and Ashish, 2013).

<sup>&</sup>lt;sup>8</sup> These comments are from Vijay Kelkar and Ajay Shah at the "Envisioning India" conference convened by the Institute for International Economic Policy at George Washington University on January 22, 2021.

<sup>&</sup>lt;sup>9</sup> These guidelines included analysis of potential PPP models, illustrative assumptions for a PPP financial model, and indicative key performance indicators, among other features.

health PPPs is limited and what does exist tends to be drawn from case studies and success stories rather than from rigorous evaluations, making it hard to assess impacts, lessons learned, government capacities, and contractor performance (La Forgia and Correa, 2019). As with PPPs in other sectors, health PPPs can fail to adhere to international good practices on design and implementation of the PPP model, including properly assessing and fairly assigning risk. This undermines expected benefits and may prove "wasteful and burdensome on the public exchequer" (Rajasulochana and Maurya, 2020).

Solid waste management is a promising health-related PPP investment area in India. A rapidly growing urban population and improving economic conditions mean that total and per capita waste is growing significantly. Municipal solid waste management is the responsibility of urban local bodies, but existing service provision is often inefficient, which leads to negative health and environmental consequences. This underscores the need for new approaches and investments including mixed funding approaches that have been used in India and other countries. One potential issue of particular relevance for solid waste management PPP projects is labor, since a large percentage of municipal staff currently works in solid waste management (Dey, 2018).

### **PPPs in Indore**

Most early PPPs in Indore were in urban transport but the portfolio has broadened to other sectors (see Table 2). It is worth noting that the government typically retains ownership after the concession period ends and there is often profit sharing with the government during the concession. Recent PPPs have focused on solid waste management<sup>10</sup> and energy with two particularly noteworthy projects described below.

- A large "cluster-based" solid waste management project in the State of Madhya Pradesh has a private concessionaire managing landfills and waste-to-energy and waste-to-compost components (Aggarwal, 2018).
- A biomethane plant in Indore hailed as "one of the largest in Asia" is being funded and built through a PPP model and is expected to open by the end of 2021. It is being built at an estimated cost of US\$20 million and is expected to provide half of the energy produced to run public buses at a subsidized rate and generate funds to the Indore Municipal Corporation as an annual premium for 20 years (Kidwai, 2020).

The Indore Smart City SPV, a private corporation created to host the Government of India resources, is owned by both the urban local body and the State of Madhya Pradesh. The National Smart City Mission envisioned there would be private sector investment in the SPVs for all 100 smart cities. It is likely that projects funded by the smart city SPVs are more suitable for discrete PPP-type investments and may be a promising target in Indore as

<sup>&</sup>lt;sup>10</sup> Solid waste management is a challenge in Indore as it is in most cities, but it should be noted that one assessment of municipal solid waste in India estimated that Indore generates 0.320 kg/day per capita which is the third lowest on a list of 23 metro cities in India and well below the national large urban city average of 0.449 (Dey, 2018).

SPVs bring together multiple local and state-level bodies where coordination on issues that plague some public projects can be anticipated and addressed quickly.

Sector	Project Description	Impact	Estimated Project Cost (in US\$)
Energy	Implementation of intelligent LED street lighting	Reliable and efficient power supply	39,000,000
Housing	Redevelopment of the Kukkut Palan Kendra and MOG Barracks land parcels in the MOG Line area	Improved housing conditions for the urban poor	104,000,000
Information Technology	Implementation of Smart Poles Project including CCTV, Environmental Sensors, WiFi, C4 Integration, etc.	Citizen friendly and cost- effective governance, public services, and connectivity	32,500,000
Sanitation	Development, operation, maintenance, and management of public urinals	Improved sanitation for residents	520,000
Solid Waste Management	Implementation of waste-to- energy plant	Reduced dependence on and conservation of energy from conventional sources	61,490,000
Urban Transport	Introduction of smart parking management	Efficient management of parking assets	260,000

Table 2. Illustrative	Selection	of Proposed or	r Active PPP	Projects in Indore
	3010011	01110003000		

Source: Smart Cities Council, 2018; Times of India, 2017; and materials provided by BHC Indore Team. Note: Cost in US\$ is converted from INR Crore using currency conversion rates as of June 25, 2021.

## Vietnam

Since the 1990s, the Government in Vietnam has shown interest in accessing private investment to bridge significant infrastructure gaps in the country. A series of laws and regulations, including the Uniform Enterprise Law of 2006, encouraged private sector development and increased foreign and domestic private investment and participation. Policies promoting "socialization" (e.g., private participation in public service delivery) enabled the collection of user fees for services and mobilized resources from the private sector, including through joint ventures. Within the health sector, the growth of private health service providers, facilitated by government policies over several decades such as the introduction of contributory social health insurance in 1992, has "transformed the Vietnamese health care system into a mixed public-private one" (Le et al., 2020).

As part of efforts to leverage private resources to deliver value for money on large infrastructure projects, the Government of Vietnam also began encouraging PPPs (Hang, 2017). Over the past decade, multiple laws, decrees, and circulars have been enacted by the National Assembly and ministries to provide a PPP regulatory framework. The creation of a PPP Unit within the Ministry of Planning and Investment was designed to help coordinate efforts, but it became clear that a single framework was necessary to unify this patchwork of laws and regulatory documents.

In 2019, the Government of Vietnam reported that 336 PPP projects had been implemented with a total investment of approximately US\$69 billion (approximately US\$205 million per project), with the majority of projects (65 percent) in transport infrastructure (Le et al., 2020). This dominance of large infrastructure projects within any country's PPP portfolio is not uncommon but Vietnam's new legal framework's minimum investment threshold requirement, explicit framing of PPPs to support "infrastructure," and exclusion of some PPP-eligible sectors such as social housing may limit smaller-scale PPP projects in sectors that are critical to public health and related outcomes.<sup>11</sup>

A new legal and regulatory framework for PPPs, approved in 2020, is expected to boost private investment by providing needed clarity for private investors and other stakeholders.<sup>12</sup> The framework identifies five PPP-eligible investment sectors (transportation, healthcare, education, electricity and water),<sup>13</sup> confirms the necessity of competitive bidding, defines a minimum investment threshold required for PPP projects (US\$8.6 million), authorizes international arbitration as a dispute resolution mechanism, offers viability gap funding of up to half of the total investment amount, and provides a minimum revenue guarantee if revenue is less than 75 percent of what was projected (Nguyen, 2020; Cooper, 2020). The new framework provides much needed supports and clarity and could increase investor confidence while decreasing legal risks and costs (Phong, 2020).

While the new legal and regulatory framework is a positive step, several obstacles to the wider adoption of strong PPPs in Vietnam will need to be addressed during the implementation of this framework:

• There is a general lack of familiarity with, or wariness of, the PPP model among key stakeholders including some bureaucrats and financial institutions who retain "suspicion of private enterprise" (Lindborg et al., 2012). There is also a tendency to prefer CSR or the socialization model, where government encourages private

<sup>&</sup>lt;sup>11</sup> It is worth noting that private healthcare has never been implemented under the PPP legal framework. Instead, it has been undertaken through socialization efforts or as direct private investment. While the new PPP law includes healthcare as an eligible sector, local stakeholders interviewed for this brief indicated that this was unlikely to change current practice give the rigidity of the new PPP law.

<sup>&</sup>lt;sup>12</sup> USAID has provided support to Vietnam to help incorporate international best practices into this first PPP law (USAID, 2019).

<sup>&</sup>lt;sup>13</sup> The government explains in the PPP law that some existing eligible sectors have been removed because they are unattractive for private investment or their projects are currently being implemented through other forms of investment.

investment and autonomy but avoids long-term agreements or any formal financial responsibility. The socialization model is relatively common in the health sector and may involve required service standards or public subsidies but does not involve a long-term public-private contract. This model is vulnerable to corruption and inefficiencies, either through overly generous agreements or by the potential for "induced demand" whereby private healthcare providers provide excess health services, leading to higher out-of-pocket costs for patients and/or health insurance agencies (Thanh et al., 2014).

- There is a general lack of adherence to international good practices on unsolicited proposals (see Table 1), particularly an absence of thorough and detailed guidelines to assess and process these proposals. This can lead to governments directly awarding funding to unsolicited PPPs, a practice that can easily be influenced or corrupted (Nguyen et al., 2018). The new PPP law is expected to address this by limiting the use of unsolicited proposals and requiring open tenders.
- There is a trust deficit between private and government partners and gaps in investor protections such as the existence of broad rights for procuring entities to terminate projects "in the interests of the nation" (Cooper, 2020). While the overall business climate is more open in southern Vietnam, the trust deficit exists across the country and is likely to persist, impacting ongoing investor perceptions of risk.
- Most sectors, except for transportation, lack guidance (e.g., circulars) from their respective ministry on sector-specific PPP regulations (Le et al., 2020).
- The most commonly used PPP project model (Build-Transfer<sup>14</sup>) is not typically viewed as a PPP "because the contract duration is short term and the private sector takes on limited risks and management responsibility" (Le et al., 2020).

## PPPs in Da Nang

Despite these challenges and the limited number of significant non-infrastructure projects to learn from, the PPP legal framework and favorable local conditions suggest strong potential in Da Nang for PPP projects that support public health. A 2020 report identified only two healthcare PPP projects in Da Nang, neither of which had yet advanced beyond project preparation (Le et al., 2020).

The first is a contract whereby a private sponsor would supply medical equipment for an obstetric and pediatric hospital and would be paid by the government through the transfer of land. The second is an integrated project where a private partner would build, operate, and then transfer a hospital (to the government) and would be paid through user fees. In January 2020, local officials also discussed partnering with the International Finance Corporation on a public bus system and waste management project, both of which have social, health,<sup>15</sup> and environmental benefits (Dan, 2020). In July 2020, the

<sup>&</sup>lt;sup>14</sup> Common PPP models, including Build-Transfer and Build-Operate-Transfer are defined in World Bank, PPP Arrangements/Types of PPP Agreements, n.d.

<sup>&</sup>lt;sup>15</sup> The bus project, for example, could help reduce air pollution from private vehicles.

city's planning and investment department identified seven hospitals, two of which are international hospitals, targeted to be financed through a PPP model (Saigon Online, 2020).

## Indonesia

Large infrastructure needs are driving interest in PPPs in Indonesia. Private sector investment in infrastructure, including through PPPs, has been identified by the Ministry of National Development Planning, Government of Indonesia (Bappenas) as a national government priority (Bappenas, 2020). The Government of Indonesia estimates that US\$360 billion is needed for current infrastructure investment and expects a quarter of financing will need to come from sources other than the state budget and state-owned enterprises (Bappenas, 2018). In 2016, there were over 120 active PPP infrastructure projects under construction or operation in Indonesia, worth approximately US\$60 billion (World Bank, 2016). As in other countries, the vast majority of PPP projects and investments have been in infrastructure, particularly roads, energy, and water.

At the national level, the government has created a comprehensive and coordinated institutional framework for infrastructure PPPs. A series of recent Presidential and ministerial regulations, including guidelines for key sectors, have been designed to refine the country's PPP regulatory framework and improve the attractiveness of the government's PPP program (Bappenas, 2018). Bappenas and government contracting agencies are responsible for planning while the Ministry of Finance and others assist with project preparation. A PPP Joint Office and the Committee for Acceleration of Priority Infrastructure Delivery (KPPIP) are responsible for coordinating PPP stakeholders and addressing bottlenecks.

The national government has created a number of resources to facilitate PPP projects (Ministry of Finance, Government of Indonesia, 2019):

- A **PPP Unit** within the Ministry of Finance is designed "to improve the quality of PPP project identification, screening, preparation, and appropriate oversight and approval function in the national PPP program" (Public-Private Infrastructure Advisory Facility, n.d.).
- The **Project Development Fund** helps agencies ensure projects have a credible business case.
- The **Viability Gap Fund**, run by the Ministry of Finance, helps catalyze impactful projects by increasing their viability by covering a portion of project costs.
- **Government guarantees** are provided by the Indonesia Infrastructure Guarantee Fund and the Ministry of Finance to reallocate risk and improve project bankability.
- Financing for land acquisition is provided by the State's Assets Management Agency at the Ministry of Finance for "national priority projects."

It is important to note that these institutions and resources are available exclusively to infrastructure PPP projects and cannot currently be tapped for service-oriented PPP projects. Recent policy efforts have also made more resources available for PPP availability payments<sup>16</sup> (Ministry of Finance, Government of Indonesia, 2019). Despite this national framework, the PPP landscape in Indonesia is dominated by activity in several large cities such as Jakarta and Surabaya and in specific regions such as Java.

These resources notwithstanding, the government and observers have identified the following needs to expand the use of PPPs in Indonesia:

- Developing greater human resource capacity of public agencies to prepare projects, execute transactions, and manage PPP projects (Ministry of Finance, Government of Indonesia, 2019).
- Ensuring closer integration of PPP development and management with budgeting processes (Ministry of Finance, Government of Indonesia, 2019).
- Benchmarking PPP processes and documentation with international standards and best practices (Ministry of Finance, Government of Indonesia, 2019).
- Clarifying the regulatory framework and addressing multiple overlapping and unsynchronized laws that lead to uncertainty and may deter private investors (Erwin et al., 2017).
- Increasing access to information to improve public oversight of private contractors and improve the ability of public entities to monitor implementation (Jensen 2017; Kang et al., 2019).

The lack of regulatory clarity about how subnational government resources can be used for PPPs may also be a reason why subnational PPPs are not more widespread.

While transportation and energy have dominated most PPP projects to date, there is increasing interest in social infrastructure, especially constructing and operating hospitals. Of the twenty projects registered in the Government's 2019 PPP infrastructure book, four are hospitals, one is to improve water supply, one is to address waste, and one is to increase bus rapid transit (Bappenas, 2019).

The Ministry of Health is also in the process of developing "technical guidelines to institutionalize and popularize" non-infrastructure health PPPs for human resources, service delivery, and commodities. These guidelines are expected to provide a regulatory framework for identifying the types of partnerships supported through current government regulations, the PPP governance structures within the Ministry of Health and throughout the government, the procedures for procuring PPPs, the sources to finance PPPs, and a framework for monitoring and evaluating PPPs (Health Policy Plus, 2020). PPPs for health services have already been used in projects in Indonesia to fill staffing gaps, secure specialized clinical expertise, collaborate on quality assurance, and provide training to providers (Health Policy Plus, 2020). Reticence among some health officials to

<sup>&</sup>lt;sup>16</sup> Availability payments are payments made by public project sponsors to private partners, tied to specific project milestones or performance standards.

embrace the PPP model remains a significant hurdle, in part due to concern about the potential for corruption. In addition, there is a need for greater information exchange on healthcare innovation, financing, and service delivery (World Bank, 2018b).

### **PPPs in Makassar**

Only a handful of PPP projects that have been proposed or launched in Makassar or South Sulawesi have been identified (see Table 4). These projects as well as conversations with local experts suggest that there is little movement on PPP projects despite interest in this model from some private stakeholders. In part, this is due to local government preference for other less complicated forms of partnering with the private sector, such as CSR projects. BHC interviews with local stakeholders indicate that while there is a local board in charge of coordinating private CSR efforts around public priorities, there have been barriers to creating a cohesive, structured approach to identifying and approving these projects.

Project	Status	Description
Makassar – Parepare Railway	Tendered (as of June 2019)	Construction and maintenance of a 142 km railway (goods and passengers) as part of a larger Trans-Sulawesi project. The anticipated investment is US\$70 million for capital and US\$77 million for operations and maintenance. A 2018 study recommended further evaluation of the regulatory arrangements and legal framework for the contract (Bappenas, 2019; Rahman et al., 2018).
AP Pettarani flyover toll road	Completed	Construction and operation of a 4.3 km toll road project in Makassar, connecting key economic hubs in the city including ports and the international airport (Voice of Indonesia, 2021).
Rinra Hotel	Completed	Development of a luxury hotel on government-owned land. While the hotel was completed, the government has not yet received a financial benefit (Hans et al., 2020).
Makassar New Port Project	Completed	Significant expansion of the capacity of Makassar's port at a total cost of approximately US\$500-800 million. The project has reportedly attracted interest from investors in Japan and the United Arab Emirates (Carruthers, 2016).
Karebosi Field improvements	Completed	Completion of improvements including drainage to Karebosi Field, a focal gathering point in the city. The project included a retail element to recoup private investment but faced delays driven in part by public resistance and concerns relating to oversight and limited public engagement (Amril, 2012).
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### Table 4. Illustrative Selection of PPP Projects in Makassar

## RESOURCES

There are numerous resources for local leaders to learn more about the PPP model or to begin building PPP project portfolios below.

### General resources:

- The <u>PPP Knowledge Lab</u> provides comprehensive information on PPPs including sector-specific guidance, (e.g., <u>health</u>), a <u>PPP Reference Guide</u> (also available as <u>PDF</u>), and <u>country PPP profiles</u>.
- The World Bank <u>PPP Screening Tool</u> helps users screen projects for potential suitability for PPP procurement.
- The <u>Public-Private Partnerships Fiscal Risk Assessment Model</u>, developed by the International Monetary Fund and the World Bank, helps governments assess the fiscal implications of PPP projects and manage these projects.
- The <u>PPP Certification Guide</u>, a joint creation of several multilateral development banks and APM Group, provides guidance for public officials and their advisors to implement PPP projects. This guide is one part of a <u>PPP Professional Certification</u> <u>program</u>, which trains individuals interested in PPPs on international best practices.
- The <u>Asian Development Bank (ADB) Office of Public-Private Partnerships</u> offers a range of information on ADB-supported PPP projects and ADB PPP strategies and resources.
- <u>PPPs in healthcare</u> is a report produced by Price Waterhouse Cooper, offers an overview of models, lessons, and trends.
- The World Bank <u>PPPs for the Poor</u> page with guidance and case studies on using PPP projects to expand service access for poor individuals and households.

### Subnational government-specific resources:

- The <u>Public-Private Infrastructure Advisory Facility (PPIAF)</u> is a multi-donor platform for providing grants and technical assistance for private participation in infrastructure. Governments, including subnational entities, can apply for funding <u>here</u> and PPIAF has a dedicated page for <u>technical assistance to subnational entities</u>.
- The UNDP **Toolkit for Pro-Poor Municipal PPPs** helps build the capacity of local governments and their partners to use PPPs to improve service deliver to the poor.
- The <u>Municipal Public-Private Partnership Framework</u> provides a short guide for municipal governments to build PPP projects and portfolios.
- A sampling of **Subnational PPP Legislation** via PPIAF.

## REFERENCES

Aggarwal, Vivek. Promoting 3R through PPP Mode Initiatives by Madhya Pradesh. Department of Urban Development & Housing, Government of Madhya Pradesh; 2018.

Amril, S. Public-Private Partnerships Based Public Services in the City of Makassar: Case Study of Karebosi Field; 2012.

APMG. PPP Certification Guide; 2016.

Asian Development Bank. Office of Public-Private Partnerships; 2021.

Bappenas (Ministry of National Development Planning). Public-Private Partnerships: Infrastructure Projects Plan in Indonesia 2018. Jakarta: Ministry of National Development Planning; 2018.

Bappenas (Ministry of National Development Planning). Public-Private Partnerships: Infrastructure Projects Plan in Indonesia 2019. Jakarta: Ministry of National Development Planning; 2019.

Bappenas (Ministry of National Development Planning). National Midterm Development Plan (RPJMN) 2020-2024 Jakarta: Ministry of National Development Planning; 2020.

Carruthers, Andrew M. Developing Indonesia's Maritime Infrastructure: The View from Makassar. ISEAS Yusof Ishak Institute Perspective. 2016; (49).

Chakraborty, Atanu, Amitabh Kant, T.V. Somanathan, K. Rajaraman, Kumar V. Pratap, and Baldeo Purushartha. National Infrastructure Pipeline: Volume 1. New Delhi: Department of Economic Affairs, Ministry of Finance, Government of India; 2020.

Cooper, Giles T. The Good, The Bad, and The Ugly – Vietnam's New Public-Private Partnership Law 2020. Legal Library (Martindale) (blog); 2020.

Dan, Quynh. Da Nang Discusses Cooperation with IFC. Danang Portal; 2020.

Department of Economic Affairs, Government of India. Public Private Partnerships in India. New Delhi: Department of Economic Affairs, Government of India; n.d.

Dey, Tumpa. Public-private partnerships in urban solid waste management: A review. International Journal of Advance Research and Development. 2018; (3:6).

Duc, Ha Anh, Lora L. Sabin, Le Quang Cuong, Duong Duc Thien, and Rich Feeley III. Potential collaboration with the private sector for the provision of ambulatory care in the Mekong region, Vietnam. *Global Health Action*. 2012; 5.

Dwivedi, Guarav, Farukh Sarkulov, Chinmay Mishra, and Asmi Saxena. Smart City in Indore: A case study. New Delhi: Centre for Financial Accountability; 2020.

Erwin, Sondang S., Sumaryana Asep, Widianingsih Ida, and Nurasa Heru. Local Government Challenges' to Implement Public Private Partnership Projects in Indonesia. *Holistica*. 2017; 8 (3): 83–96.



Hang, Dinh Thi Thuy. Evaluation of Qualitative Value for money of Public-Private Partnership Projects In Vietnam. *Journal of International Studies*. 2017; 10 (4):192–206.

Hans, Amril, Hardiyanti Munsi, S. Fatimah, and AM. Fahrul. The Challenges of Public Private Partnership in Indonesia: Case Study in Makassar City, South Province. *B-SPACE*. 2020; 26–28.

Health Policy Plus. Improving and Supplementing the Public Healthcare Workforce with Public-Private Partnerships in Indonesia; 2020.

Jensen, Olivia. Public–Private Partnerships for Water in Asia: A Review of Two Decades of Experience. International Journal of Water Resources Development. 2017; (1): 4–30.

Kang, Seong, Dhanakorn Mulaphong, Eunjin Hwang, and Chih-Kai Chang. Public-Private Partnerships in Developing Countries: Factors for Successful Adoption and Implementation. International Journal of Public Sector Management. 2019; 32 (4): 334– 51.

Kelkar, Vijay, Shri S. B. Nayar, Shri P. Pradeep Kumar, Shri Sudipto Sarkar, P. S. Behuria, Shekhar Shah, Vikram Limaye, Shri Rohit Kumar Singh, Sharmila Chavaly. Report of the Committee on Revisiting and Revitalising Public Private Partnership Model of Infrastructure. New Delhi: Department of Economic Affairs, Ministry of Finance; 2015.

Kidwai, Aafrin. Indore announces plans for one of Asia's largest biomethanation plants. Solid Waste India; 2020.

La Forgia, Jerry, Kiran Correa. PPPs in India: Expansion without Evidence. Aceso Global (blog); 2019.

Le, Sang Minh, Ramesh Govindaraj, Caryn Bredenkamp. Public-Private Partnerships for Health in Vietnam. Washington, DC: World Bank; 2020.

Leigland, James. Public-Private Partnerships in Developing Countries: The Emerging Evidence-Based Critique. The World Bank Research Observer. 2018; 33 (1): 103–34.

Lindborg, Jon D., Federic Thomas, Eric J. F. Francoz, Jeremie Dumon. Assessment of Public–Private Partnerships in Viet Nam: Constraints and Opportunities. Manila, Philippines: Asian Development Bank and Agence Francaise de Developpement; 2012.

Mahalingam, Ashwin. PPP Experiences in Indian Cities: Barriers, Enablers, and the Way Forward. Journal of Construction Engineering and Management. 2010; 136 (4).

Mahalingam, Ashwin, Ganesh Devkar, Satyanarayana N. Kalidindi. A Comparative Analysis of Public- Private Partnership (PPP) Coordination Agencies in India What Works and What Doesn't. *Public Works Management and Policy*. 2011; 16 (4): 341–72.

Ministry of Finance, Republic of Indonesia. A Brief on Current Indonesia PPP Program. Jakarta: Ministry of Finance, Republic of Indonesia; 2019.

Ministry of Housing and Urban Affairs, Government of India. Smart Cities Mission; n.d.

Ministry of Urban Development, Government of India, and Confederation of Indian Industry. Compendium on Public Private Partnership in Urban Infrastructure: Case Studies. New Delhi: Ministry of Urban Development, Government of India, and Confederation of Indian Industry; 2017.

NITI Aayog, Government of India. Guidelines for Public-Private Partnership for Noncommunicable Diseases. New Delhi: NITI Aayog, Government of India; 2018.

Nguyen, Anh, Abu Mollik, Ying-Yi Chih. Managing Critical Risks Affecting the Financial Viability of Public–Private Partnership Projects: Case Study of Toll Road Projects in Vietnam. *Journal of Construction Engineering Management*. 2018; 144 (12).

Nguyen, Tung. Vietnam Parliament Approves Long-Awaited PPP Law. Hanoi Times; June 20, 2020.

Organization for Economic Co-operation and Development. Methodology for Assessing Procurement Systems; 2016.

Phong, Gia. New PPP Law a Milestone for Vietnamese Infrastructure Market: Fitch Solutions. Saigon Times; July 8, 2020.

Pratap, Kumar V. Role of PPPs in Indian Smart City Mission. New Delhi: Ministry of Urban Development, Government of India; 2017.

Price Waterhouse Cooper. PPPs in healthcare; n.d.

Public-Private Infrastructure Advisory Facility. INDONESIA: Development of Public Private Partnership (PPP) Unit in the Ministry of Finance Indonesia and Assessment of Indonesia's PPP Project Pipeline; n.d.

Public-Private Infrastructure Advisory Facility. Sub-national and Municipal Policies Laws and Regulations; 2021.

Rahman, Herawati Zetha, Mohammed Ali Berawi, Bambang Susantono, Perdana Miraj, Jade Sjafrecia Petroceany, Rosemarie Maya. Investigation of an Operation and Maintenance Framework in the Railway Industry: A Case Study of the Makassar-Prepare. International Journal of Technology. 2018; no. 3: 549–57.

Rajasulochana, Subramania Raju, Dayashankar Maurya. Lessons from Healthcare PPP's in India. International Journal of Rural Management. 2020; 16 (1).

Ruiz-Nunez, Fernanda, Clive Harris, Henry Kasper, Elena Timusheva, Zichao Wei, Lauren Wilson. The State of PPPs: Infrastructure Public-Private Partnerships in Emerging Markets & Developing Economies 1991-2015. Washington, DC: World Bank; 2016.

Saigon Online. Da Nang Plans Seven Hospital Projects. Saigon Online; July 17, 2020.

Smart Cities Council. See how Indore is planning smart projects in the city; 2018.

Thanh, Nguyen X., Bach X. Tran, Arianna Waye, Christa Harstall, Lars Lindholm. 'Socialization of Health Care' in Vietnam: What is it and what are its pros and cons? Value in Health Regional Issues 3C. 2014; 24-26.

Times of India. Smart poles and LED light to cost Rs. 300 crores; 2017.

Tiwari, Sanjay, Amit Ashish. A Review on Cancellation of PPP Projects in India. International Journal of Agriculture Innovations and Research. 2013; 2 (6): 202–13.

USAID. USAID Supports Vietnam's First Public Private Partnership (PPP) Law; 2019

Voice of Indonesia. Conglomerate Anthony Salim 'Reunited' With BCA At the AP Pettarani Makassar Flyover Project; 2021.

World Bank. Building an Initial PPP Pipeline. PPP Knowledge Lab; n.d.

World Bank. Country PPP Profiles; 2021.

World Bank. Dedicated PPP Units. PPP Knowledge Lab; n.d.

World Bank. India. PPP Knowledge Lab; 2017a.

World Bank. Indonesia. PPP Knowledge Lab; 2016.

World Bank. Indonesians Could Be Healthier with Stronger Public-Private Partnerships. World Bank (blog); 2018b.

World Bank. Municipal and Other Subnational PPPs. PPP Knowledge Lab; n.d.

World Bank. Municipal Public-Private Partnership Framework; n.d.

World Bank. PPP Arrangements/Types of PPP Agreements. PPP Legal Resource Center; n.d.

World Bank. PPPs for the Poor; 2020.

World Bank. PPP Knowledge Lab; 2021.

World Bank. PPP Reference Guide; 2017.

World Bank. PPP Screening Tool; 2017.

World Bank. Procuring Infrastructure-Private Partnerships; 2018a.

World Bank. Public-Private Partnerships Fiscal Risk Assessment Model (PFRAM): Version 2.0; 2019.

World Bank. Public-Private Partnerships: Reference Guide Version 3. International Bank for Reconstruction and Development; 2017b.

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