ADB

Completion Report

Project Number: 49904-001
Technical Assistance Number: 8907
September 2017

Market Study for a Fund Focused on PPPs in Developing Asia

Asian Development Bank

<table>
<tr><td colspan="3">TA Number, Country, and Name:

TA 8907-REG: Market Study for a Fund Focused on PPPs in Developing Asia</td><td colspan="2">Amount Approved: $100,000

Revised Amount: NA</td></tr>
<tr><td>Executing Agency:
Asian Development Bank</td><td colspan="2">Source of Funding:
Technical Assistance Special Fund (TASF-Others)</td><td>Amount Undisbursed:
$32,824</td><td>Amount Utilized:
$67,176</td></tr>
<tr><td>TA Approval Date:
16 Jun 2015</td><td>TA Signing Date:
16 Jun 2015</td><td>Fielding of First Consultant:
13 Jul 2015</td><td>TA Completion Date
Original:31 Aug 2015
Account Closing Date
Original:31 Aug 2015</td><td>
Actual:31 Dec 2015

Actual:18 Mar 2016</td></tr>
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Description

ADB estimates that developing Asia will need to invest $26 trillion from 2016 to 2030, or $1.7 trillion per year, to maintain its growth momentum, eradicate poverty, and respond to climate change[1]. Without climate change mitigation and adaptation costs, $22.6 trillion will be needed, or $1.5 trillion per year (baseline estimate). Of the total climate-adjusted investment needs over 2016–2030, $14.7 trillion will be for power and $8.4 trillion for transport. Investments in telecommunications will reach $2.3 trillion, with water and sanitation costs at $800 billion over the period.

Public–private partnerships (PPPs) are seen as a promising solution for helping to encourage new infrastructure financing at scale. Collaboration between the public and private sectors through PPPs can leverage additional financing and improve the delivery of infrastructure services. However, one of the key constraints to crowding in private investment into PPPs is the lack of bankable PPP projects. To help address this constraint, ADB established a dedicated fund in 2014 to help developing member countries (DMCs) prepare PPP projects (Asia Pacific Project Preparation Fund, or AP3F[2]).

To complement ADB's infrastructure and PPP initiatives, this TA was established to explore the development of a new financing vehicle (fund) to expand the range of support needed to address financing gaps. While AP3F provides project preparatory support, it does not finance the ensuing project development activities. The TA was designed to provide scoping for a potential new fund that would be able to provide capital needed to develop projects prepared by AP3F as well as other potential high development impact initiatives. ADB anticipated the Fund would be able to take an ownership stake in projects with cooperation or partnership with relevant governments.

The TA supported a market gap study to assess the need and market appetite for a dedicated infrastructure fund. The study focused on opportunities for early stage financing (using equity, mezzanine, and guarantees) of PPP infrastructure projects in the Asia Pacific region currently not adequately served by the market. The study provided analysis on low income countries, lower middle-income countries and upper middle-income countries[This information has been removed as it falls within exceptions to disclosure specified in paragraph 97 (ix) of ADB's Public Communications Policy (2011).][3] It then focused on ten developing Asia countries in greater detail (Bangladesh, Cambodia, Indonesia, Lao People's Democratic Republic (Lao PDR), Myanmar, Pakistan, Philippines, Sri Lanka, Thailand, and Viet Nam). The study involved considerable industry dialogue, and provided a proof-of-concept by identifying financing gaps from empirical evidence and assessing the demand for capital in infrastructure projects. It also included an assessment of private equity fund activity and performance.

[1] Asian Development Bank. 2017. *Meeting Asia's Infrastructure Needs.* http://dx.doi.org/10.22617/FLS168388-2
[2] Asian Development Bank. 2014. *Asia Pacific Project Preparation Facility.* https://www.adb.org/documents/asia-pacific-project-preparation-facility
[3] [This information has been removed as it falls within exceptions to disclosure specified in paragraph 97 (ix) of ADB's Public Communications Policy (2011).]

The TA was aligned with the Midterm Review of Strategy 2020's strategic objectives of developing infrastructure projects on a larger scale than ADB's own resources can finance, leveraging private sector investments more effectively, and supporting PPPs through innovative financing solutions, leading to an increased number of profitable, well-governed and environmentally responsible PPP infrastructure investments in developing Asia and the Pacific.

Impact, Outcome, and Outputs

The market gap study found there is considerable liquidity in equity and debt markets for infrastructure projects in developing Asia but investors and lenders are hampered by the lack of bankable projects. [This information has been removed as it falls within exceptions to disclosure specified in paragraph 97 (i) of ADB's Public Communications Policy (2011).]

The major reasons for the lack of bankable projects are the misallocation of risk arising from [This information has been removed as it falls within exceptions to disclosure specified in paragraph 97 (i) of ADB's Public Communications Policy (2011).] PPP project selection, preparation and structuring processes, and [This information has been removed as it falls within exceptions to disclosure specified in paragraph 97 (i) of ADB's Public Communications Policy (2011).] government support and/or risk mitigation products to address political, legal and regulatory, currency and credit, and demand risks for lenders. The study found that [This information has been removed as it falls within exceptions to disclosure specified in paragraph 97 (viii) of ADB's Public Communications Policy (2011).] widespread adoption of availability payment structures is critical to the bankability of transport, and water supply and sanitation projects. The risk mitigation products offered by international financial institutions are not widely used, and are not making a significant contribution to mobilizing private sector financing for infrastructure projects in Asia. Affordability issues undermine the financial viability of some transport and water supply and sanitation projects even with robust risk allocation arrangements, and in these situations, concessional funding in the form of long tenor subordinated debt could lower costs and allow the projects to achieve financial close.

The major constraints identified to PPP infrastructure projects were as follows (in no particular order):

1. Weak regulatory environments
2. Creditworthiness of contractual partners, including national and local governments and SOEs (lack of credit enhancements)
3. Availability of capable local partners
4. Currency risk (in markets where insufficient domestic debt)
5. Land acquisition
6. Short tenor of domestic (local currency) debt
7. Political risk
8. Lack of viability gap funding for "strategic" projects with marginal financial viability.
9. Market/demand risk (lack of availability payments)
10. Service affordability

[This information has been removed as it falls within exceptions to disclosure specified in paragraph 97 (viii) of ADB's Public Communications Policy (2011).]

The Study recommended the establishment of a $5–10 billion financing vehicle to provide concessional blended multiproduct financial solutions under two categories:

- Risk mitigation solutions to address political risks (breach of contract), creditworthiness of availability payment counterparties, to extend local currency debt tenors, and to hedge currency depreciation, among other risks. Flexibility is required in tailoring solutions as often lenders do not require cover for the full range of risks. For example, products such as on-demand revolving letters of credit, and exchange rate liquidity facilities can be used to address availability payment shortfalls and/or delays and currency depreciation respectively; and
- Funding solutions to improve financial viability of projects with tariffs constrained by affordability issues (long tenor debt subordinated to and priced below senior debt), and co-development

equity to share early stage risks with and to allow project developers to upscale existing projects and/or recycle equity (development and project equity).

The results of the study were used to inform ADB operational teams including those from ADB's Private Sector Operations Department and Office of Public–Private Partnerships. They were also instrumental in helping to establish an ADB co-financing trust fund, the Leading Asia's Private Sector Infrastructure Fund (LEAP) in March 2016 with the Japan International Cooperation Agency (JICA). The fund is a $1.5 billion infrastructure co-financing fund that leverages and complements ADB's existing nonsovereign platform to fill financing gaps and increase access to finance for infrastructure projects in the region (with both concessional and commercial resources). The fund provides cofinancing to nonsovereign infrastructure projects at different stages of development, including early stage, growth stage, and greenfield and brownfield projects. The fund undertakes project finance (nonrecourse or limited recourse) and corporate finance transactions, and seeks to support a range of private sector participation modalities including public–private partnerships, joint ventures, private finance initiative projects, and privatizations, as well as conventional project finance. Eligible project types include the following infrastructure subsectors:

- energy, including renewable energy generation, energy efficiency and conservation, and natural gas transmission and distribution;
- water and other urban infrastructure and services, including water, wastewater, and solid waste management;
- transport, including road transport, water transport, rail transport, air transport, multimodal logistics, urban roads and traffic management, and urban public transport;
- information and communication technology; and
- health.

The fund extends ADB's operations by deploying both commercial and concessional capital from the same fund, and cofinancing can be provided in the form of loans, equity investments, and mezzanine finance transactions.

Delivery of Inputs and Conduct of Activities
The TA resources adequately covered the terms of reference for the project. The consulting services contract was signed on 13 July 2015. A consultant was hired with expertise in nonsovereign operations with a focus on PPP projects and investment vehicles. The contract entailed 7 person-months of international consulting on an intermittent basis.

[This information has been removed as it falls within exceptions to disclosure specified in paragraph 97 (vii) of ADB's Public Communications Policy (2011).]

Evaluation of Outputs and Achievement of Outcome

The TA was satisfactorily completed. The consultant produced the deliverables in accordance with the terms of reference. There was a slight delay in the submission of the final report. No additional costs were incurred as a result of the delay.

Overall Assessment and Rating

Successful. There were no major issues reported during TA implementation.

Major Lessons

The TA concluded that the binding constraint for infrastructure development in Asia is not a lack of financing (countries accounting for 95% of Asia's total investment needs have high savings rates—People's Republic of China (PRC), India, Japan, Republic of Korea, Malaysia, Thailand and Viet Nam). However, main constraints include a lack of bankable projects; inadequate policy and institutional frameworks; weaknesses in the public sector that hamper its capacity to implement infrastructure projects (except in the PRC); and weak support for public–private partnerships (PPPs).

Recommendations and Follow-Up Actions

Evidence suggests that there is considerable scope for ADB to focus on improving pipelines of bankable PPP projects in ADB's DMCs. Similarly, there is significant scope to strengthen public sector capacity and develop improved policy and institutional frameworks.

TA = technical assistance.

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