

## ECONOMIC AND FINANCIAL ANALYSIS

### A. Background

1. Inadequate or underdeveloped infrastructure has been identified as one of the key constraints on the Philippines' growth. The 2016–2017 Global Competitiveness Report by the World Economic Forum ranked the Philippines 57th out of 138 countries, advancing it by 28 places since 2010, mainly on improvements in the macroeconomic environment. However, the country ranked low on infrastructure (95th), well below other Southeast Asian countries such as Malaysia (24), Thailand (49), and Indonesia (60). Among the direct impacts of inadequate infrastructure are the high costs of doing business which undermine business potential and economic opportunities, especially in rapidly growing urban areas. Poor infrastructure has also resulted in significant disparities in economic growth and poverty rates among regions, as it has limited mobility, access to employment, and social services. Of the country's 18 regions, three (Metro Manila and two adjacent regions in Luzon) account for nearly two-thirds of gross domestic product (GDP). National poverty incidence stood at 21.6% of the population in 2015, but is much higher in the Visayas (28.2%) and Mindanao (36.2%).

2. Inadequate infrastructure is attributed to the following factors: (i) low public infrastructure investment (2% of GDP since 2000) relative to needs (estimated at 7%–8% of annual GDP); (ii) need to fast-track and enhance project planning and preparation; (iii) limited access to international technical and managerial know-how for project preparation, innovation, and implementation; and (iv) need for stronger inter-agency coordination. Delays in safeguard compliance, procurement, and land acquisition, as well as poor project management, hamper project delivery.

### B. Project Overview

3. The government's Ten-Point Socioeconomic Agenda includes ramping up investment in public infrastructure such as national roads, expressways, bridges, airports, subways, and railways. Public spending on infrastructure is targeted to reach 7% of GDP by 2022 from the current level of around 2% of GDP. With recent large official development assistance (ODA) pledges from the People's Republic of China (PRC) and the Government of Japan, the government is gearing up to fast-track public infrastructure project preparation and to continue expanding its public—private partnership program.<sup>1</sup>

4. To fully leverage the pool of foreign ODA official development assistance and domestic funds pledged and budgeted for infrastructure investments, the government has requested assistance from the Asian Development Bank (ADB) to support the two key agencies responsible for public infrastructure projects, i.e., the Department of Public Works and Highways (DPWH) and the Department of Transportation (DOTr). The assistance—Infrastructure Preparation and Innovation Facility—mainly involves the conduct of pre-investment activities such as feasibility studies and detailed engineering designs, which will help accelerate the Investment Coordination Committee's (ICC) review and approval process, and ensure timely, high-quality procurement and implementation. The facility is aligned with the following impact: accelerating progress in infrastructure delivery for inclusive and sustainable socioeconomic development.<sup>2</sup>

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<sup>1</sup> In January 2017, Japanese Prime Minister Shinzo Abe pledged \$8.66 billion of aid to the Government of the Philippines for national public infrastructure projects, on top of \$15 billion of soft loans offered by Chinese President Xi Jinping in October 2016.

<sup>2</sup> National Economic and Development Authority. 2017. *Philippine Development Plan 2017–2022*. Manila.

5. The project will support the Government of the Philippines in meeting its goals of accelerating infrastructure development by enhancing the capacity of DPWH and DOTr for the preparation and management of infrastructure projects. The technical assistance (TA) loan will (i) facilitate project readiness and enhance the quality of priority project proposals for review and approval by the Investment Coordination Committee, and (ii) strengthen the capacity for project planning and preparation.

6. The project is expected to cost \$164.06 million, of which ADB will finance \$100 million through a TA loan. It has the following outputs: (i) road and bridge projects prepared; (ii) water projects prepared; (iii) rail, public transport, port, and airport projects prepared; and (iv) project development management system prepared. The cost of the first three outputs is estimated at \$114.40 million, and the fourth output is expected to cost \$3.60 million. The average cost of public project preparation in the Philippines stands at 3%—comparable to international norms. The total public investment in national infrastructure projects of DPWH and DOTr, supported by the facility, is estimated at \$3,813 million.<sup>3</sup>

### C. Proxy Cost–Benefit Analysis

7. The medium-term government spending fiscal multiplier in the Philippines is 1.36—higher than 0.19 in Indonesia but lower than 3.83 in the PRC.<sup>45</sup> The Philippines’ short-term government spending fiscal multiplier, which captures the immediate demand-side effects arising from increased government spending, is estimated at 0.74—slightly lower than 0.79 in Bangladesh and 0.76 in Indonesia. Hence, if government spending on public infrastructure takes place in 2019, the short-term benefits cover the period 2019–2020, and the medium-term benefits are generated during 2021–2024.

8. Near-term benefits to the economy include the boost to domestic demand, with gains in consumption, investments, and employment. Over the medium term, infrastructure projects potentially augment economy-wide productive capacity, stimulate overall potential growth, and reduce poverty. These benefits, however, largely depend on the efficiency of the public investment process, such as project selection and implementation.

8. The facility is estimated to usher in direct benefits in terms of a \$3,813 million investment in public infrastructure.<sup>6</sup> This public investment is estimated to add \$3,527 million<sup>7</sup> to GDP during 2019–2020, and \$6,482 million during 2021–2024.<sup>8</sup> Therefore, the total addition to GDP as a result of public investment generated by the facility and subsequently delivered is estimated at \$10,009 million during 2019–2024.

<sup>3</sup> Based on the National Economic and Development Authority, project preparation (e.g., feasibility studies and detailed engineering designs) takes up around 3% of the total project cost. Therefore, government spending on public infrastructure catalyzed by the facility can be estimated roughly at \$2,560 million (\$76.79 million divided by 3%).

<sup>4</sup> G. Ducanes et al. 2006. Macroeconomic Effects of Fiscal Policies: Empirical Evidence from Bangladesh, People’s Republic of China, Indonesia, and the Philippines. *Economics and Research Department Working Paper Series*. No. 85. Manila: Asian Development Bank.

<sup>5</sup> The government spending fiscal multiplier measures the impact on GDP as a result of an increase in government expenditure by 1% of GDP in the first year. “Medium-term” encompasses the 4-year period that includes the year in which the government spending happens.

<sup>6</sup> For the direct benefits to be fully realized, the national infrastructure projects prepared under the facility will have to be financed and implemented in a timely manner.

<sup>7</sup> The \$3,813 million investment represents approximately 1.25% of GDP in 2016 in US dollar terms. Hence, the short-term impact of the facility is the product of: (i) 0.74 short-term government spending fiscal multiplier (estimated for a 1%-of-GDP increase in public investments); (ii) 1.25% of the GDP increase in public investment generated by the facility; and (iii) \$3,813 million of public investment projects prepared by the facility.

<sup>8</sup> The medium-term impact of the facility is the product of: (i) 1.36 medium-term government spending fiscal multiplier (estimated for a 1%-of-GDP increase in public investments); (ii) 1.25% of the GDP increase in public investment generated by the facility; and (iii) \$3,813 million of public investment projects prepared by the facility.

9. Overall, the facility can be considered as an economically beneficial operation, especially in terms of substantiating the impacts of public investment on GDP. The benefit–cost ratio for the facility (based on direct benefits) is high and is estimated at approximately 23.24.

<b>Estimated Benefit–Cost Ratio</b>		
<b>Cost (\$ million)</b>	<b>Benefit (\$ million)</b>	<b>Benefit–Cost Ratio</b>
164.06	3,813 (generated public investment)	23.24
	10,009 (addition to GDP during 2019–2024)	61.00

GDP = gross domestic product.

Source: Asian Development Bank estimates.