# PROGRAM IMPACT ASSESSMENT

## I. Background

1. This Program Impact Assessment (PIA) complements the PIA developed under subprogram 1 of Expanding Private Participation in Infrastructure Program (EPPIP) and describes the impacts (benefits and costs) of the program on the infrastructure sector and the wider Philippine economy. The PIA identifies a number of problems that were facing the sector (and the impacts of these problems on the wider Philippine economy), and then outlines the key components of the subprogram 2 and the ways in which these reforms affect private participation in infrastructure. It quantifies the costs associated with the program and identifies the benefits which, by virtue of the long lead times associated with infrastructure investment, are in their early stages of manifestation. Benefits of the reforms have been valued using the same principles as in subprogram 1. To avoid double-counting, all benefits and costs are calculated only with respect to the initiatives registered under during subprogram 2 and are assumed to accrue over a four-year period.

# II. Executive Overview

2. The economy of the Philippines is growing steadily, with an average economic growth rate of 6.2% per year from 2011 to 2017. However, public investment, particularly in infrastructure is insufficient to sustain this growth. Infrastructure gaps represent major bottlenecks for foreign investment and higher economic growth.

Costs and Benefits of Subprogram 2 Present Values in USD million						
		Gross Benefits	Costs	Net Benefits		
Reform Areas	1	306	100	206		
	2	1,375	344	1,031		
	3	252	38	214		
	Total	1,933	482	1,451		

3. To address the infrastructure deficit, the government launched a comprehensive infrastructure development program named *Build, Build, Build* (BBB). Although official development assistance has been, and will remain, a cornerstone of international economic support for the Philippines, PPP projects have a number of distinct practical advantages in terms of knowledge transfer and fiscal flexibility at the local government level. Therefore, a balance in the modalities of infrastructure delivery will be maintained, and reform of PPP processes is necessary to support it.

4. In support of this strategy, the reforms in this subprogram will strengthen the Public-Private Partnership (PPP) market by encouraging a range of governance initiatives which improve the framework for delivering PPP projects, and accelerate a number of major investments. Building on subprogram 1, subprogram 2 of EPPIP provides additional quantifiable net benefits of \$1,451 million. The benefits of these reforms arise primarily out of reform area 2 and consist of: (i) the increased value of infrastructure investment attributable to the enhanced PPP program; and ii) the efficiencies gained through the use of the PPP financing modality over pure public investment. The major projects sponsored by the subprogram are on transport infrastructure, with other projects devoted to health and education. These have widespread benefits for both producers and consumers in the Philippines and, in some instances, they contribute directly to poverty alleviation.

5. The quantifiable costs of the initiative are likely to be borne by taxpayers. They consist of select budgetary outlays associated with the PPP program and include provision of right-of-way and resettlement costs, viability gap funding, and contingent liabilities. To a lesser extent, the costs also include expenses associated with improving infrastructure delivery channels. The main non-quantifiable cost is some localized displacement of individuals and businesses as new physical infrastructure is deployed. As with subprogram 1, the costs associated with right-of-way, resettlement, and viability gap funding have not been assessed as part of the direct costs of the program. They would have largely been incurred regardless of how the government financed its infrastructure products. Program-related costs have therefore been limited to limited to the costs of administering the PPP program, capacity development, and the cost of covering contingent liabilities associated with the program.

# III. Development Problem and Constraints

6. The Philippines recorded a growth rate of 6.8% of gross domestic product (GDP) in 2016; gross fixed capital formation represented around 24% of GDP, and its share of the growing economy has been rising. However, lower level data indicate that an insufficient portion of investment has been channeled into infrastructure, and that an uplift is needed if the economy is to maintain its growth trajectory. Navarro and Llanto (2014) observe that infrastructure spending languished in the early 2000s between 1.4 and 2.9% of GDP, and the ratio of public investment to GDP was well below that of regional peers.<sup>1</sup> In 2014, the ratio of public spending on infrastructure to GDP was only 2.74%.<sup>2</sup> The Philippine Development Plan (PDP) (2011–2016) consequently identified infrastructure as a "critical constraint" to economic growth, and this theme has carried over into the current PDP (2017–2022).

7. Inadequate and low quality of infrastructure has made the economy vulnerable and less competitive, which poses a potential challenge for the Philippines to maintain its high growth in the medium to long run. The World Economic Forum (WEF) ranked the Philippines at 56<sup>th</sup> in terms of overall competitiveness but 113<sup>th</sup> in terms of the overall quality of its infrastructure. Roads are a major deficiency. Planta (2017)<sup>3</sup> reports that congestion in Metro Manila alone costs around \$51million per day and that only 61.8% of city roads and 29% of provincial roads are paved. Despite being an archipelagic country, the ports of the Philippines are also problematic. The World Bank's Country Policy and Institutional Assessment (database rates them as the third worst in ASEAN, and the WEF ranks the country at 114<sup>th</sup> in the world. It compares only slightly more favorably in relation to rail infrastructure, electricity, and telephony.

8. Past concerns over fiscal sustainability largely explain the government's traditionally tight fiscal position and the low level of public spending in infrastructure. This increased the urgency of finding co-investors on major infrastructure projects. However, macro-level factors are not the only cause of the infrastructure deficit. Inefficiencies in the administration and management of public investments also represent a constraint. The IMF's public investment efficiency index identifies the Philippine public sector as operating well below the efficiency of a comparator group

<sup>&</sup>lt;sup>1</sup> Komatsuzaki, T. (2016) "Improving Public infrastructure in the Philippines", IMF Working Paper WP/16/39.

<sup>&</sup>lt;sup>2</sup> Government of the Philippines. National Economic and Development Authority. 2017. *Philippine Development Plan* (2017–2022), p.284. Manila.

<sup>&</sup>lt;sup>3</sup> Planta, RM (2017), "Transport Infrastructure Development under the Philippine Development Plan (2017– 2022)", <u>http://ncts.upd.edu.ph/tssp/wp-content/uploads/2017/07/PDP-Transport\_TSSP-24th-21July2017.pdf</u>

of emerging market economies, while its recently introduced Public Investment Management Assessment framework, shows the Philippine public sector to be particularly weak in terms of the allocation of capital (footnote 1).<sup>4</sup> Private sector surveys tend to corroborate these measurements. For example, the WEF ranks the public institutions of the Philippines at 102<sup>nd</sup> in the world.

9. For example, despite recent improvements, institutional, legal and regulatory shortcomings still require hobble the use of PPPs. The Philippines has the longest-standing legislative frameworks for the PPP in Asia.<sup>5</sup> The main institutions are the PPP Governing Board as the overarching policy-making body, the PPP Center, the main facilitating and monitoring agency, and the Project Development and Monitoring Facility which is a revolving fund to provide technical assistance grants for project preparation activities. However, these institutions were created by executive orders of the President and need to be institutionalized through amendments of the Build-Operate-Transfer law being legislated in Congress (PPP Act).

10. The World Bank ranks the Philippines at 136<sup>th</sup> in terms of its ability to enforce contracts. In relation to PPPs, a particular problem is that terms of engagement are often set too early in the process, with little room for legal or contractual maneuver as issues come to light in the bidding process. A related problem has been the poor conduct of the tendering process for PPPs. In the past, participants in major projects have complained that tendering mechanisms are improper or inadequate, and the tenders themselves have often failed. Examples of relatively recent projects that have been affected in this way include the Mactan-Cebu International Airport and the Cavite-Laguna Expressway Project.

11. Property rights generally, and right-of-way acquisition and resettlement issues, have further impeded PPP. For example, Phase 2 of the NAIAX Expressway project was substantially delayed in 2014, when the government failed to provide full right of way to the successful bidder according to an agreed schedule. Delays to the modernization of the Philippine Orthopedic Center were caused by workers' objections. Tariff setting has also been problematic, with some investors reportedly deterred by unexpected changes to tariff setting regimes. Administrative and planning difficulties such as these are compounded by financial problems at the project level. Although PPPs can stimulate projects which would otherwise be too risky for the private sector, they are sometimes under-funded on the public side in ways that do not necessarily reflect macro-level fiscal constraints.

12. For example, funding to take account of these problems has not always been robust, and the uncertainly surrounding funding of contingent liabilities to meet unanticipated shortcomings in the PPP process has discouraged investors. An ADB study of the problem (ADB 2016),<sup>6</sup> suggests that issues exist at both the macro and micro levels. Processes and criteria for managing contingent liabilities have not been transparent at either the project or portfolio level, while liquidity and appropriation risks have also undermined programs.

13. Finally, vertical coordination between layers of government exhibit similar problems, particularly as it pertains to local government units (LGUs). More needs to be done to strengthen the capacity of LGUs if they are to deliver PPP projects efficiently. The necessary reforms span the legal, institutional, and regulatory frameworks, as well as monitoring and evaluation.

<sup>&</sup>lt;sup>4</sup> IMF (2015), "Making Public Investment More Efficient," <u>http://www.imf.org/external/np/pp/eng/2015/</u> 061115.pdf

<sup>&</sup>lt;sup>5</sup> The Build-Operate-Transfer Law was established in 1990.

<sup>&</sup>lt;sup>6</sup> ADB. 2016. *Philippines: Management of Contingent Liabilities Arising from Public Private Partnerships.* Manila.

14. The result of inefficiency in government delivery is mainly apparent in delays and overruns. In 2010, 10 PPP projects were promised for delivery in 2011 in the Philippines, but the projects were ultimately not delivered until 2015.<sup>7</sup> Prominent among the reasons for the delay were bureaucratic factors. Preconstruction activity is beset with problems in the areas of documentation, feasibility studies, and spatial planning.

# IV. Reform Program

15. In tandem with the much larger project pipeline being rolled out under the BBB program, a stronger national infrastructure strategy, coordination and prioritization process are being put in place. This will ensure an investment program-based on an optimal mix of government financing, official development assistance and private capital. Moreover, the Philippine Development Plan recognizes transport infrastructure is one of the more critical shortage areas in the Philippines. Target investments include rail, road, air and maritime facilities. Private sector participation brings to projects certain types of expertise that are not always easily acquired through other channels. Notably, private sector operators are generally more adept at identifying risks and delivering to agreed budgets and timeframes. It is also possible to reduce monopoly profits, and improve taxpayer welfare, through a well-run PPP program. If properly conducted, PPP tenders can ensure more accurate pricing of projects than would be available in the absence of competition. PPP projects are also more likely than some other investment modes to have a strong demonstration effect. The success of a PPP project may stimulate a willingness to invest in infrastructure.

16. Aligned with these initiatives, the program includes three reform areas designed to address development constraints: (i) strengthening government financial support to PPPs within its national fiscal framework; (ii) expanding and efficiently implementing the pipeline of PPP projects; and (iii) strengthening the legal and regulatory framework for PPP project preparation and implementation. Simply lifting the volume of public investment will contribute strongly to the overall value of the subprogram. Komatsuzaki (2016) estimates the response patterns of real GDP in the Philippines to increases in public investment. Even without any increase in the efficiency, a two-percent increase in its share of GDP is estimated to increase GDP after 15 years by between 4.5% and 6%. And if only half of the estimated inefficiency in the process was removed, the GDP increase would be between 9% and 11%.

17. Not surprisingly, reform areas under 1 are specifically concerned with lifting the overall level of investment through PPP programs. It provides around \$1.02 billion in funding for a range of initiatives related principally to transport infrastructure. The subprogram's theme of investment in transport is well adapted to a PPP delivery mode. PPP projects are better directed toward economic sectors where it is possible for the public sector to keep pace. Technology-intensive projects, for example, are less likely to be easily transferrable to the public sector (IMF, 2015).

18. The designation of the funding is also appropriate. Specifically, a large proportion of the funding has been earmarked for the purpose of right-of-way acquisitions and resettlements, with an emphasis on transport infrastructure. Inattention to the issues of property rights and resettlement has been a particular problem in the past, as major projects having been shelved due to the inability of the public sector to deliver right-of-way as scheduled. By earmarking the funding for acquisitions and resettlements, the government has tackled the problem efficiently,

<sup>&</sup>lt;sup>7</sup> Ang, J (2015), "4 concrete ways to move the Philippines' public-private partnership programs forward", Infrastructure and Public-Private Partnerships Blog, The World Bank, http://blogs.worldbank.org/ppps/4-concreteways-move-philippines-public-private-partnership-programs-forward.

effectively assigned itself project responsibilities in which it has a comparative advantage over the private sector.

19. The allocation of funding to contingent liabilities is also important. ADB conducted an extensive study of contingent funding problems in the PPP framework of the Philippines (footnote 7), and it has identified six areas in which improvements are required. The report also recommended the establishment of a contingent liabilities fund, which would be backed by budget appropriations. This particular recommendation is supported under reform area 1 with the government having committed approximately \$580 million in contingent funding in each of 2016 and 2017. The uplift in funding has also been complemented by improvements to the management of contingent liabilities. A specific risk management program has been developed which takes into account areas previously identified by the ADB as problematic. These include definitions of contingent liabilities, disclosure policies, accountability issues and documentary requirements.

20. In terms of expanding and implementing the pipeline of projects (reform area 2), the program covers 33 specific projects that are at various stages of completion. To improve standards of public sector performance, the government has provided a substantial uplift in funding for costs of right-of-way acquisition, resettlement, contingent liabilities, and roll-on-roll-off maritime facilities. It also lifts government infrastructure in terms of providing a national transport policy, greater support for LGUs (including a PPP strategy for LGUs), frameworks for PPP risk assessments, online management of priority projects, contract standardization and major resourcing uplifts in the Department of Transportation (DOTr) and Department of Public Works and Highways (DPWH).

21. In keeping with the emphasis on transport infrastructure in the subprogram, there has been an uplift in the capacity of the DOTr and the DPWH itself. This uplift has been achieved through structural enhancements for PPP development and implementation including a PPP Service Office with 69 staff in DPWH and a planning and project development structure in DOTr. Also encouraging is the uplift in regulation supporting these developments. Planta (2017) observes that legislative improvements to the regulatory framework include the creation of a national transport policy, laws for independent regulators governing the railway and maritime transport sectors, as well as the creation of a body for transport safety and security.

22. Reform area 2 also contributes to the subprogram's value by supporting the involvement of LGUs in the PPP process. The Philippines has 80 provinces, and its geography means that responsibility for infrastructure needs to be at least partly devolved to lower tiers of government. Projects currently being developed which involve LGUs include the Mactan Naval Base project, the Cebu Bus Rapid Transit System and the New Bohol Airport. As previously noted, LGUs have not always been able to provide optimal support for such projects. Therefore, the subprogram recognizes a substantial pipeline in terms of LGU projects: two have been approved, one has been tendered, feasibility studies for two have had completed, and ten are in early phases of development. The subprogram also modernized the resources of the government's PPP Center to assist LGUs. The projects just cited have all enjoyed technical support from the Center, and they are part of a series of initiatives designed to deepen technical engagement. The Center has signed memoranda of agreements with local capacity building institutions.

23. Several measures in the subprogram also contribute to efficiency and transparency in public administration (reform area 3). The creation of a PPP handbook on standard contract provisions and the establishment of the Public Investment Program Online (PIPOL) system are important examples. PIPOL adds greater transparency to the pipeline of new projects. It is

designed to assist in the transfer to a more performance-based system of project management by allowing agencies to submit proposals for simpler and more efficient validation. In addition, the PPP Governing Board and the PPP Center have formalized aspects of the PPP process that had been subject to uncertainty. They include guidelines for PPP appraisals, public consultation processes, the appointment of probity advisers, and guidelines for assessing value for money in PPP projects.

# V. Estimations of the Benefits and Costs of the Reforms

#### **Thematic Summary**

The following table provides a thematic summary of the main elements of the subprogram.

	Enabling Outputs		outs	Summary of economic impact	
Name of reform	Reform Reform Re		Reform Area 3		
The generation of public infrastructure that might not otherwise be undertaken	*	*	*	Major improvements to trade-related maritime and other infrastructure.	
Sustainable budget funding of right-of-way and land acquisition, resettlement and interface infrastructure	*	*		This improves bankability of PPP projects, leading to more competitive bidding for projects (efficiency gains), and facilitates the substitution of government projects with PPPs (efficiency gains).	
Strengthening of systems for management and funding of PPP contingent liabilities	*	*		This improves bankability of PPP projects, leading to more competitive bidding for projects (efficiency gains), and facilitates the substitution of government projects with PPPs (efficiency gains).	
Facilitation of infrastructure finance mechanisms and tools to leverage capital market resources for PPPs	*	*		This increases the availability of investment funds for private participation in infrastructure projects, leading to more competitive bidding for projects (efficiency gains), and facilitates the substitution of government projects with PPPs (efficiency gains).	
Improved long-term infrastructure planning		*		Improved information provision assists the private sector in undertaking longer term strategic planning for participating in PPPs, leading to more competitive bidding for projects (efficiency gains), and facilitates the substitution of government projects with PPPs (efficiency gains).	
Increased institutional scope of the (PDMF) to cover development of LGU PPPs		*		Increased use of PPPs by LGUs displaces LGU-delivered infrastructure projects (efficiency gains).	
Improved PPP project implementation oversight, procurement procedures, and audit		*		This will help to ensure PPP projects are delivered efficiently and contractual obligations are met (efficiency gains).	

 Table 1:
 Summary of economic impacts of EPPIP reforms

	Enabling Outputs			Summary of economic impact	
Name of reform	Reform Area 1	Reform Area 2	Reform Area 3		
Improved PPP project appraisal system		*		This will promote learning and expertise in government agencies, leading to better PPP practices (efficiency gains).	
Institutionalization of PPP management systems in national and local government contracting agencies		*		This will increase assurances and confidence for governments and private investors, facilitate the substitution of government projects with PPPs (efficiency gains) and improve PPP practices (efficiency gains).	
Amendments to the BOT law to sustain the improved PPP institutional, procedural, budgetary, and regulatory frameworks		*	*	This will increase assurances and confidence for governments and private investors, facilitate the substitution of government projects with PPPs (efficiency gains) and improve PPP practices (efficiency gains).	
Development of PPP- related implementing regulations and guidelines (e.g., alternative dispute resolution mechanisms, material adverse government action, and termination payments)		*	*	This will increase assurances and confidence for governments and private investors, facilitate the substitution of government projects with PPPs (efficiency gains) and improve PPP practices (efficiency gains).	
Implementation of PPP regulations and procedures, including those arising from eventual adoption of amendments to the BOT law		*	*	This will increase assurances and confidence for governments and private investors, facilitate the substitution of government projects with PPPs (efficiency gains) and improve PPP practices (efficiency gains).	

BOT = Build-Operate-Transfer, LGU = local government unit, PDMF = project development and monitoring facility, PPP = public-private partnership.

## Methodology

24. Benefits of the reforms have been valued using the same principles as in subprogram 1. These principles recognize that 40% of the projects within the subprogram would likely have proceeded on their economic merits, even in the absence of the subprogram. A further proportion of projects (30%) would have proceeded with government sponsorship, and a final proportion (30%) would not have taken place without the contribution of the subprogram. Therefore, the subprogram itself delivers a 30% uplift in the value of infrastructure that is associated with it in reform areas 1 and 2. This estimate is conservative, in the sense that it assumes the entire value of the projects to have been capitalized in the outlay. No wider or ongoing social gains from the investments have been factored in.<sup>8</sup>

25. The benefits also assume that PPP projects are delivered more efficiently than other projects. Private sector efficiency is presumed to increase the speed with which projects are

<sup>&</sup>lt;sup>8</sup> These is the same methodology and assumptions and methodology found in the PIA for subprogram 1.

delivered, and it is expected to deliver them on time and so bring forward benefits. In fact, these gains are likely to be substantial. Komatsuzaki (2016) finds that, on a macro level, halving the inefficiency of government in public infrastructure investment would approximately double the effects of an increase in that investment on GDP. Furthermore, the gains from a more efficient public-sector delivery mechanism are enhanced, not only for the current round of infrastructure investments, but for future projects as well. The extent to which PPP can contribute to this uplift has been heavily studied. International evidence suggests a wide range of potential benefits to PPP programs. A survey by Grimsey and Lewis (2007) found that studies find a PPP benefit in a range between 5% and 40%,<sup>9</sup> with most values between 9% and 20%. Having regard to these studies, and following the parameters set out in subprogram 1, the overall efficiency benefit of having a project delivered via PPP has been assumed to be 15%.<sup>10</sup>

26. To avoid double-counting, only gains associated with the second subprogram have been considered and are expected to accrue over a four-year period. Explicit costs of the reforms are treated in the same way. They recognize only those costs that are attributable to the delivery of infrastructure investment via PPP channels. The costs of investments that might have taken place irrespective of the delivery mode are not considered. Costs and benefits have been valued using an exchange rate of P51.41 to the US dollar. Inflation has been factored out of both costs and benefits in order to keep values in real terms.

27. The subprogram is likely to have externalities – both positive and negative – for which values cannot readily be assigned. Positive externalities include the benefits that are specific to PPP as a delivery mechanism. These include de-risking of projects and the potential for knowledge transfer to government. In addition, and for the purposes of a conservative valuation, no positive externalities have been assigned to the investments themselves. In contrast to the positive externalities, there are very few negative externalities. The main non-quantifiable cost of the subprogram is the likelihood of some displacement of individuals and enterprises as a result of the physical deployment of infrastructure. The assessment effectively assumes that the funding is a transfer of an appropriate amount from taxpayers to those displaced.

## Benefits

28. The benefits of reform areas 1 and 2 are defined as the value of investment attributable directly to the PPP program. The total value of PPP projects under the initiative total \$5.60 billion. On the assumption that around 30% of these benefits would not have occurred without delivery via a PPP channel, this component of the benefits is around 1.68 billion. The benefits have been allocated to the reform areas according to the estimated share of those outputs in the total investment delivery. **Reform area 1** entails investment of approximately \$1.02 billion, and a corresponding gross benefit of \$306 million is assumed. **Reform area 2** is associated with \$4.5 billion of investment in gross terms and therefore delivers a gross benefit of \$1.38 billion.

29. Efficiency benefits of delivery via a PPP channel are registered in **Reform area 3.** These benefits have been valued by assuming that the improvement in government processes will increase the value of the benefits in output 1 and output 2 by a further 15%. The quantifiable gross benefits under the output therefore total \$252 million.

<sup>&</sup>lt;sup>9</sup> Grimsey, D. & M Lewis (2007), "Public Private Partnerships and Procurement", Agenda, v14, no.2.

<sup>&</sup>lt;sup>10</sup> The PIA for subprogram 1 also assumed 15% but utilized a rate of 7.5% to be conservative.

## Costs

30. As with benefits, the costs of the subprogram are assumed to relate only to those investments that would not have occurred without government commitment to a PPP delivery mode. These costs have been allocated across the three outputs in a manner broadly consistent with the themes of the outputs.

31. The first set of costs involves bidding for PPP projects that would not have arisen under alternative investment delivery modes. These costs are likely to have been reduced by a considerable amount as a result of the increase in efficiencies delivered by the subprogram itself. An amount of \$100 million has been allocated to them, taking into account costs generated within both the public and private sectors.

32. The second set of costs involves contingent funding liabilities. The government earmarked approximately \$1.15 billion over 2016 and 2017 for contingent funding liabilities under the subprogram. As with the first subprogram, 30% realization is assumed to apply to these appropriations, delivering a cost on contingent funding liabilities of \$344 million.

33. The final set of costs involves the administrative procedures necessary to increase the capability of government to deliver a more efficient PPP process. These costs would not have arisen without the subprogram, and they have been valued at \$33 million. This estimate has regard for specific budgetary allocations in the policy matrix, but also allows for some longer-term capacity retention, such as the new PPP positions created within the DOTr and the DPWH. An additional \$5 million has been allocated as a once-off cost for PIPOL infrastructure.

34. A number of additional budgetary outlays by the Government of the Philippines are associated with PPPs. These relate to provisions for right-of-way and resettlement costs, access (interface) infrastructure, and viability gap funding. These outlays and provisions have not been assessed as part of the costs of the program because they are likely to be incurred by the government regardless of whether an infrastructure project is undertaken as a PPP or a government infrastructure project.

## Risks

35. There are a number of risks related to the program. The largest of these are the intrinsic viability risks around the investments themselves. These would include execution risks, as well as legal and regulatory risks. The most likely channel through which these risks would be realized would be through an increase in the rate of realization on costs earmarked for contingent liabilities.

36. In addition, experience suggests that administrative failures and corruption on the part of government may delay projects, increase costs, and defer benefits. If realized, these risks will reduce the estimated present values, under reform area 1.

37. Finally, there are funding risks associated with the program. The Philippines is growing briskly, and there is a risk that inflationary pressures could push up longer term interest rates, in which case the government's funding costs on items such as contingent liabilities might well rise.

Channel of Effect General Specific		Impact on	the Sector/Economy	Estimated benefits, Winners and Losers
		Short to medium Term	Long Run	
Strengthened government financial support to PPPs	Strengthened provisions and processes for contingent liabilities, and right of way, resettlement and interface infrastructure	Increased assurance that the government will be able to manage the PPP risks it agrees to bear and compensate the private sector for any costs imposed on it by such risks. This should increase private interest in PPPs and lead to more competitive bidding and the substitution of government projects with PPPs.	Greater private participation in infrastructure will increase the overall level of infrastructure investment in the Philippines and increase the efficiency of infrastructure investment by displacing government projects. This will boost economic growth and help to achieve a number of social objectives such as poverty alleviation.	The benefits of a stronger PPP program include taxpayers (who benefit from reduced government funding costs in the long run), as well as shareholders and creditors of participating firms. A stronger PPP program might also strengthen knowledge transfer from the private, to the public, sector and so stimulate human capital formation in the Philippines.
An expanded and efficiently implemented pipeline of PPP projects	Higher rates of public investment	A slight increase in inflation is possible to the extent that new investments increase aggregate demand before delivering productive capacity. Government funding costs may also rise slightly. Gains to employment and incomes will also be generated in the affected sectors.	A moderation in the rate of inflation and significantly higher output are likely over the longer run as the supply-side stimulus from installed infrastructure takes effect.	Gains accrue in the short run to those immediately associated with the investment. Over the long term, supply side benefits are widely distributed in the form of lower prices, reduced operating costs and higher output across a wide range of economic sectors. Funding costs for the government contribution will be borne by taxpayers. To the extent of progressivity in the taxation system, the incidence of these costs should fall on the comparatively wealthy. Some displacement of individuals and businesses is expected as a result of the physical deployment of infrastructure. Funds have been earmarked for compensation.
Strengthened governance frameworks for PPPs	Amendments to BOT law, development implementing regulations and guidelines	Stronger oversight of PPP projects by government.	An ongoing substitution of government projects for PPP projects, leading to increased efficiency and number of infrastructure projects, and help to achieve a range of social objectives such as poverty alleviation.	Benefits take the form of lower production costs and they accrue to taxpayers, as well as shareholders and creditors of investing companies in the private sector. The benefits to taxpayers are net of the costs of enhanced invigilation and PPP administration.

# Table Summary: Subprogram Impact Assessment

ADB = Asian Development Bank, BOT = Build-Operate-Transfer, PPP = public-private partnership.