

Assessment of planning and programming for capital projects at the national and agency levels

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Infrastructure capital or the so-called economic infrastructure (roads, railroads, seaports, airports; water and waste water treatment facilities; electricity generation, transmission, and distribution facilities; and telecommunications) is positively related to growth (Aschauer 1989; Esfahani and Ramirez 2003; Calderon and Serven 2004; Sahoo et al. 2010). Empirical evidence suggests that there is a significant link between rural infrastructure and agricultural productivity (Llanto 2012), i.e., electricity and roads are significant determinants of agricultural productivity. Nevertheless, this relationship is still clouded by debate and uncertainty as the link between infrastructure and growth is not particularly clear from some data (Straub and Terada-Hagiwara 2010; Straub 2011).

World Bank (2004) identifies the challenges that developing and transition economies

face in restructuring and encouraging private participation, and establishing new approaches to regulation in infrastructure. In another report, World Bank (2005) analyzes the challenges facing Philippine economic infrastructure sectors. While the country has achieved significant accomplishments in infrastructure provision, particularly in terms of access to infrastructure services by the general population, infrastructure deployment has not kept up with high population growth and rapid urbanization. This has an implication to the country's competitiveness as well as to its growth and poverty reduction targets.

Based on World Bank's assessment of the country's transport infrastructure (WB 2009), government agencies need to enhance

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their capacity in certain areas of project management, particularly in planning and project preparation and monitoring and evaluation. Most agencies, according to the report, do not give priority to and provide adequate funding for project preparation (i.e., feasibility studies, analysis for value for money and value engineering) to improve the quality of national planning processes for transport infrastructure. Major efforts by the government to provide infrastructure have often been a reactive response to crises rather than a proactive input to effective long-term infrastructure planning. A combination of insufficient central oversight; lapses in coordination among agency plans and projects; and failure to insulate infrastructure planning, prioritization, and implementation from political intrusion is hampering infrastructure development.

This *Policy Note* assesses the existing planning and programming systems in the Philippines for capital projects at the national and agency levels and presents some recommendation to improve these systems. Capital projects are defined as infrastructure projects, regardless of the funding source. Data were drawn from a document review of public investment planning and programming process and key informant interviews with staff and officials of four oversight agencies (Department of Budget and Management [DBM], National Economic and Development Authority [NEDA], Department of Finance [DOF], and Public-Private Partnership [PPP] Center) and with officials of three implementing agencies

responsible for the national government's infrastructure program (Department of Public Works and Highways [DPWH], Department of Transportation [DOTr], and Department of Agriculture [DA]).

Assessment of current systems

Continued investment in infrastructure is needed to support rapid and sustained economic growth and to equalize development opportunities. However, planning and coordination are important aspects in infrastructure development as required investments are large, involve many players, span over many years, and are immersed in a political process in trying to address public needs. Traditionally, public investments are based on the country's development plan. This approach, however, has the tendency to become disconnected from fiscal constraints leading to a situation where the required funding in the development plan is not matched by the approved budget. To address the need to synchronize infrastructure planning, programming, budgeting, monitoring, and evaluation, three public expenditure management systems have been instituted: (1) performance-informed budgeting, (2) public investment program, and (3) three-year rolling infrastructure program.

Performance-informed budgeting (PIB)

The DBM has departed from incremental budgeting approach to adopt the zero-based budgeting approach. The former is based on the agency's historical budget and adjusted for nonrecurring and terminated projects as well

as for changes in inflation rate and exchange rate. The latter is based on the agency's need and performance, as well as its relevance to national priorities and strategic plan. Another approach to link planning and budgeting is the adoption of the two-tier budgeting approach in 2015 to ensure that a budget is designed to allocate taxpayers' money only to carefully planned projects that deliver tangible results for public welfare. Under Tier 1 of this approach, DBM assesses agencies based on their operating needs, the cost of running existing programs and projects, and their ability to use up their budget and deliver on their targets. Under Tier 2, DBM assesses agencies' proposals for new projects or expand existing ones. Under Tier 1, agencies will get only the budget they need and can dispose of within the stated period. Under Tier 2, agencies have to convince DBM that their projects are implementable, have direct and measurable impact on the public, and are in line with the government's agenda for inclusive growth. For fiscal year (FY) 2018, the Development Budget Coordination Committee (DBCC) has earmarked 83 percent of obligation budget ceiling to Tier 1 and 17 percent to Tier 2 based on forward estimates (DBM 2016a, 2017b, 2017c). The DBCC approves the fiscal position for a particular year (e.g., FY 2018); this approved fiscal position will translate to an obligation budget ceiling (e.g., PHP 3,840.0 billion for FY 2018).¹

The PIB is an improvement of output-based budgeting by presenting both financial and physical targets in the General Appropriations

Act (GAA). This approach shows where the funds will be allocated and the expected results from each allocation. In 2000, DBM introduced the Organizational Performance Indicator Framework (OPIF) to improve the way the budget is allocated, reported, and spent toward greater accountability and transparency in the delivery of public services. OPIF attempts to shift an agency's accountability from activities (inputs) to major final outputs, and it strengthens the alignment of department/agency major final outputs (MFOs) with the sectoral/spatial outcomes identified in the Philippine Development Plan (PDP) (DBM 2011). In 2018, DBM will implement the next phase of the PIB called Program Expenditure Classification (PREXC) that was conceptualized in 2015. OPIF directs resources toward results and accounts for performance by identifying the MFOs that the agency delivers to its clients. OPIF attaches indicators of performance for each MFO. On the other hand, PREXC restructures an agency's budget to group all recurring activities as well as projects under appropriate programs or key strategies. Thus, performance information and costs are assigned at the program level rather than at the agency and MFO levels (Table 1).

Moreover, DBM argues that the shift from agency outputs to programs or strategies as focus provides a better handle in assessing

¹ President Duterte and his Cabinet approved on July 3, 2017 a proposed national budget of PHP 3.767 trillion to be submitted to Congress on July 24, 2017.

Table 1. Differences between OPIF and PREXC

OPIF	PREXC
Outcome performance indicators at the organizational level	Outcome performance indicators at the program level to show how programs and strategies contribute to achieving an agency's objectives
Organizational-level outcome and output (major final output) targets	Program-level outcome and output targets
Line items defined as programs, activities, and projects are grouped under each major final output.	Line items (whether recurring or projects) are grouped by program.

OPIF = Organizational Performance Indicator Framework

PREXC = Program Expenditure Classification

Source: Department of Budget and Management (2016b)

agency performance and tradeoffs; provides better information for planning, prioritization, and organizational management of agencies; contributes to improved transparency and accountability; and helps to link inputs to objectives or outcomes better (DBM 2017a).

Public Investment Program (PIP)

The PIP is a six-year programming document accompanying the PDP together with the Results Matrix (RM). The PIP contains the priority programs, activities, and projects (PAPs) to be implemented by the national government (NG), government-owned and -controlled corporations, government financial institutions, and other NG offices and instrumentalities that contribute to the societal goals and outcomes specified in the PDP and RM, within the medium term. The PIP also incorporates proposed NG-implemented

programs and projects in the Regional Development Investment Program (RDIP).² The planning and programming process also links the spatial coherence of the sectoral inputs of national agencies with the RDIP. Agencies are required to submit their PAPs for inclusion in the PIP through the PIP online system, a web-based project database system that manages data entry and updates on programs and projects, including the generation of reports (NEDA 2014, 2017).

The PIP serves as an instrument to tighten the linkages between planning, programming, budgeting, monitoring, and evaluation and as the basis for public sector resource allocation and for lining up public sector PAPs for processing at the Investment Coordination Committee (ICC) and the NEDA Board. It is also useful for monitoring public investment performance vis-à-vis the goals and targets set under the PDP/RM. This process was demonstrated in the Revalidated Public Investment Program: 2011–2016 that discussed the status of major priority PAPs implemented from 2011 to 2012, identified the priority PAPs for the remaining plan period (2013–2016), and highlighted the strategic core investment programs and projects (CIPs) that address critical indicators of the RMs. The revalidation process involved consultation with representatives from the Regional Development Councils, civil society organizations, private sector groups, and various government agencies, including regional offices, attached agencies, and bureaus (NEDA 2014).

² The RDIP contains priority programs and projects that contribute to the societal goals and outcomes spelled out in the Regional Development Plan and its Results Matrices (NEDA 2017).

PIP is composed of Tier 1 and Tier 2 PAPs that are aligned with the PDP and RM, and which satisfy the responsiveness, readiness, and other criteria. The PAPs could be implemented via GAA, official development assistance (ODA), and public-private partnership.

Table 2 shows the top 10 agencies in terms of 2013–2016 PIP investment targets. It indicates that the DPWH has the highest investment targets at PHP 985.59 billion, followed by the DA at PHP 462.47 billion, and DOTr at PHP 348.51 billion. The 2017–2022 PIP is still being finalized, but data for DOTr show that it submitted the 2017–2022 PIP investment targets valued at PHP 1,573.82 billion, which are 352 percent higher than its 2013–2016 investment targets.

CIPs are a subset of the PIP and contain the big ticket programs and projects of the PIP that serve as pipeline for the ICC and the NEDA Board. NEDA (2014) identified 114 strategic CIPs for 2013–2016, 89 of which are projects for accelerating infrastructure development, costing PHP 1.3 trillion.

Three-year rolling infrastructure program (TRIP)

The TRIP was reinstated by the NEDA Board Committee on Infrastructure (INFRACOM) on October 27, 2014 to build the pipeline of strategic and other projects needed to promote inclusive growth and to synchronize the infrastructure planning, programming, budgeting, and execution processes both at the oversight and implementing agency levels. TRIP

Table 2. Top 10 agencies in terms of 2013–2016 PIP investment targets (in PHP million)

Agency	Total for 2013–2016	Total for Continuing Investment Projects	Overall Total
Department of Public Works and Highways	985,586.25	575,322.39	1,560,908.64
Department of Agriculture	462,468.07	49,287.62	511,755.68
Department of Transportation and Communications	348,508.26	14,452.25	362,960.51
Department of Education	274,192.33	5,353.78	279,546.11
Department of Social Welfare and Development	257,558.92	-	257,558.92
Department of Health	242,374.74	-	242,374.74
Department of Environment and Natural Resources	160,794.68	7,493.36	168,288.04
Department of Energy	151,493.25	-	151,493.25
Department of National Defense	73,560.14	15,893.63	89,453.77
Department of the Interior and Local Government	68,007.03	42,460.50	110,467.53

PIP = Public Investment Program

Source: National Economic and Development Authority (2014)

is intended to ensure that the agencies' annual budget ceilings are optimized and utilized in the funding of priority infrastructure PAPs that are likewise responsive to the outcomes and outputs under the PDP and are readily implementable. The lack of project readiness at entry is one of the causes of delay in the approval process. In addition, approved project implementation plans in terms of annual work schedules and budgets are never carried out in full, leading to implementation delays, underspending, expenditure realignment, or cost overruns (DBM-NEDA 2016).

Agencies submit to NEDA their respective TRIPs. In consultation with respective



Continued investment in infrastructure is needed to support rapid and sustained economic growth and to equalize development opportunities. This study, however, finds inconsistencies in the government's current planning, programming, and budgeting processes, which are important aspects in infrastructure development. (Photo by dbgg1979/Flickr)

agencies, NEDA reviews these and produces a consolidated TRIP that is presented to INFRACOM for approval before submitting it to DBM. DBM then determines agency budget ceilings based on spending levels approved by the DBCC.

TRIP is a subset of the PIP and covers all nationally funded infrastructure projects regardless of cost and financing source (GAA, PPP, or ODA), based on the synchronized planning, programming, and budgeting process of the government. Agencies are required to indicate the different stages³ of the projects listed under the TRIP to ensure that well-developed and readily implementable projects queue up for the budget. TRIP is a programming and monitoring mechanism to ensure that the government's target spending level on public infrastructure (e.g., 5–7% of gross domestic product) shall be met.

Inclusion in the TRIP is a requirement for issuance of the multiyear obligational authority (MYOA) by the DBM. MYOA is a document issued by DBM for projects (locally funded or foreign assisted) implemented by agencies to authorize the agencies to enter into multiyear contracts for the full project cost. The obligation to be incurred in any given year shall not exceed the allotment released for the project during the given year. Agencies must submit to DBM for the succeeding budget year the requirement of the project covered with MYOA (DBM 2015).

³ TRIP requires information on the type and magnitude of budgetary resources needed by the projects such as right-of-way acquisition, resettlement action plans, conduct of feasibility studies, detailed engineering design, preconstruction expenses, and construction implementation.

Conclusion and policy recommendations

The existing planning, programming, and budgeting systems in the country satisfy the main requirements for fiscal transparency. However, they can be further improved following international best practices, such as those by Australia, Chile, Ireland, Norway, and the United Kingdom (Patalinghug 2017).

The inconsistency between DBM's program-based output/outcome indicators and NEDA's sector-based medium-term output/outcome indicators needs to be reconciled. There is also a need to link the medium-term plan indicators with the goals of *Ambisyon Nation 2040*.

The study suggests the following institutional reforms.

Short term

- Harmonize DBM-PREXC indicators with NEDA-RM indicators.
- Establish an online public investment project database.
- For DBM: Disseminate to a wider audience information on its budget reform initiatives.
- For DPWH: Make a projection of needed additional personnel to cope with the demands of the build-build-build program.
- For DOTR: Address organizational weaknesses by submitting a restructured staffing pattern to DBM for funding.
- For DA: Explore a coordinative mechanism with its infrastructure-related attached agencies.
- For DOF: Take the lead in the preparation of a medium-term fiscal strategy.

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Medium term for NEDA

- Assume the responsibility of processing and evaluating large infrastructure projects.
- Take the initiative in formulating a continuous training and capacity-building program in project analysis for government officials.
- Develop and produce sector-specific manuals.

Long term

- For line agencies (through their trained personnel and guided by sector-specific project evaluation manuals) to reassume the task of preparing and evaluating projects.
- Establish a multiyear planning and budgeting system fully costed and coordinated with the budget process and consistent with the long-term fiscal projections.
- Adopt a project approval process implemented by a single agency operating within a framework established by the Cabinet secretaries.
- Under the proposed planning and programming system: for DBM to oversee the investment, financial design, and implementation stages for projects with approved budget, for implementing agencies to take over the operation after the completion of the projects, and for NEDA to handle the postassessment phase. ☐

References

- Aschauer, D. 1989. Is public expenditure productive? *Journal of Monetary Economics* 23(2):177–200.
- Calderon, C. and L. Serven. 2004. The effects of infrastructure development on growth and income distribution. Working Paper No. 270. Santiago, Chile: Central Bank of Chile.
- Department of Budget and Management (DBM). 2011. OPIF reference guide. Manila, Philippines: DBM.
- . 2015. Updated guidelines for issuance of multiyear obligational authority. Circular Letter No. 2015-7. Manila, Philippines: DBM.
- . 2016a. *Kwento sa bawat kwenta*. Manila, Philippines: DBM.
- . 2016b. Program expenditure classification. Manila, Philippines: DBM.
- . 2017a. Adoption of program expenditure classification-based performance-informed budgeting for the preparation of the proposed national budget for fiscal year 2018. National Budget Circular No. 569. Manila, Philippines: DBM.
- . 2017b. Budget priorities framework for preparation of the FY 2018 agency budget proposals under Tier 2 of the two-tier budgeting approach. National Budget Memorandum No. 128. Manila, Philippines: DBM.
- . 2017c. *People's budget 2017*. Manila, Philippines: DBM.
- Department of Budget and Management-National Economic and Development Authority (DBM-NEDA). 2016. Policy guidelines and procedures for the formulation of the three-year rolling infrastructure program. Joint Circular No. 2016-01. Manila, Philippines: DBM and NEDA.
- Esfahani, H. and M. Ramirez. 2003. Institutions, infrastructure, and economic growth. *Journal of Development Economics* 70(2):443–477.
- Llanto, G. 2012. The impact of infrastructure on agricultural productivity. PIDS Discussion Paper No. 2012-12. Makati City, Philippines: Philippine Institute for Development Studies.
- National Economic and Development Authority (NEDA). 2014. *Philippine Development Plan 2011–2016: Revaluated Public Investment Program*. Pasig City, Philippines: NEDA.
- . 2017. Formulation of the 2017–2022 Public Investment Program. Memorandum from Secretary Ernesto M. Pernia. January 20. Pasig City, Philippines: NEDA.
- Patalinghug, E. 2017. Assessment of planning and programming for capital projects at the national and agency levels. PIDS Discussion Paper No. 2017-37. Quezon City, Philippines: Philippine Institute for Development Studies.
- Sahoo, P., R. Dash, and G. Nataraj. 2010. Infrastructure development and economic growth in China. Discussion Paper No. 261. Chiba, Japan: Institute of Developing Economies.
- Straub, S. 2011. Infrastructure and development: A critical appraisal of the macrolevel literature. *Journal Economic Literature* 47(5):683–708.
- Straub, S. and A. Terada-Hagiwara. 2010. Infrastructure and growth in developing Asia. ADB Economics Working Paper Series No. 231. Mandaluyong, Philippines: Asian Development Bank.
- World Bank (WB). 2004. *Reforming infrastructure, privatization, regulation and competition*. Washington, D.C.: WB.
- . 2005. *Philippines: Meeting infrastructure challenge*. Washington, D.C.: WB.
- . 2009. *Philippines. Transport for growth – An institutional assessment of transport infrastructure*. Washington, D.C.: WB.

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