

**Infrastructure**



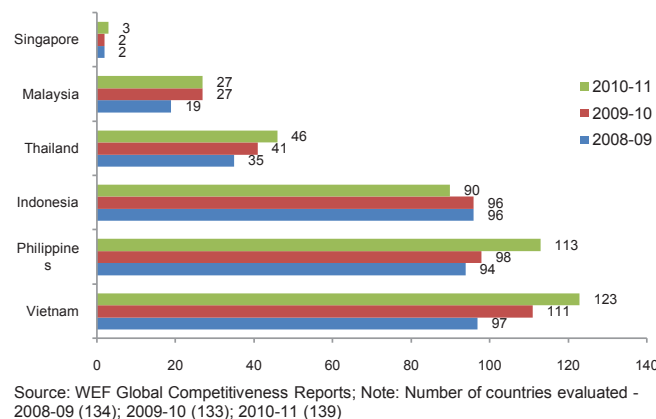
**Sector Background and Potential**

The Philippines is significantly underinvesting in physical infrastructure, with its public sector infrastructure budget consistently below 3% of GDP. Spending on social infrastructure for education and health is also inadequate at slightly over 4% of GDP.<sup>53</sup>

Polls of businessmen repeatedly show poor infrastructure as one of the top challenges facing the Philippine economy, second only to corruption. Like corruption, poor infrastructure severely weakens economic competitiveness.

In the last two WEF Global Competitiveness Reports, among the ASEAN-6 economies, the country’s overall infrastructure quality ranked below Singapore, Malaysia, and Thailand and about the same as Indonesia and Vietnam (see Figure 65).

**Figure 65: Quality of overall infrastructure rankings, ASEAN-6, 2008-2010**



<sup>53</sup> Based on calculations from the Asian Development Bank (ADB), as percentage of GDP, the Philippines spent about 2.9% on education, 1.2% on social security, 0.5% on health, and 0.1% on housing and community amenities in 2008. The 2009 DepEd budget of PhP 158 billion represents a per student spending of PhP 8,000 for each of the more than 20 million students in basic education, one of the lowest spending levels in Asia.

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Table 27 shows a similar pattern of the Philippines in comparison to the ASEAN-6 countries for measures of power quality, telecommunications, access to water and sanitation, and roads. The Philippines is ranked the lowest for fixed telephone lines per 100 inhabitants and percentage of total road network paved.<sup>54</sup>

**Table 27: Key Infrastructure Indicators, ASEAN-6**

Country	Household electrification rate <sup>1</sup>	Quality of electricity supply score (WEF, 2010) <sup>2</sup>	Electricity dist & trans losses as % of total supply (2008) <sup>3</sup>	Main (fixed) telephone lines per 100 inhabitants (2009)	Mobile phone per 100 inhabitants (2009)	Population with access to improved water sources, % (2008)	Population with access to improved sanitation, % (2008)	Road density- Population per km of road	Paved roads as % of total road network <sup>4</sup>
Indonesia	91.1	3.6	10.1%	14.8	69.3	80	52	521.4	59.1
Malaysia	97.8	5.7	2.3%	15.7	110.6	100	96	220.0	79.9
Philippines	83.3	3.4	12.6%	4.5	81.0	91	76	425.7	22.2
Singapore	100.0	6.7	5.1%	39.1	140.3	100	100	1,455.5	100.0
Thailand	99.2	5.7	6.1%	10.4	122.6	98	96	683.1	99.9
Vietnam	96.1	3.6	10.1%	34.9	100.6	94	75	604.5	39.0

Sources: Demographic and Health Surveys, IEA, EIA, ITU, UNESCO, UN Statistical Data, ASEAN Secretariat, WEF, World Bank and respective public works offices

1 - Indonesia - 2007 data (DHS); Malaysia - 2005 (2009 Energy Outlook, ADB); Philippines - 2008 (DHS); Singapore - 2005 data (2009 Energy Outlook, ADB); Thailand (2009 Key Indicators, ADB); Vietnam - 2005 data (2009 Key Indicators, ADB)

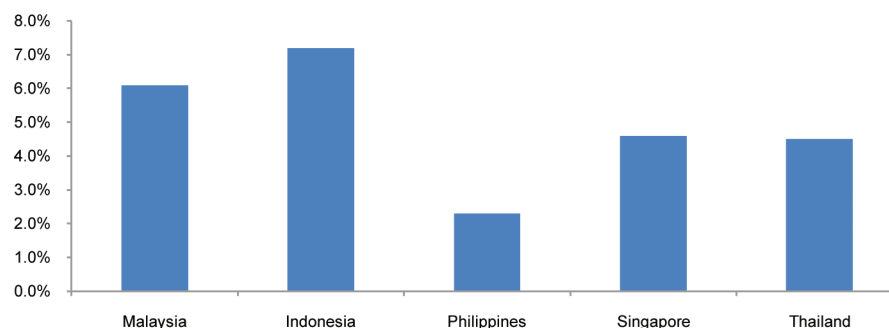
2 - WEF GCR 2010-2011; Q: How would you assess the quality of the electricity supply in your country (lack of interruptions and lack of voltage fluctuations)? [1 = insufficient and suffers frequent interruptions; 7 = sufficient and reliable]

3 - Derived using International Energy Agency Data

4 - This refers to the entire road network; Indonesia - 2008 data (Public Works); Malaysia - 2006 data (Public Works); Philippines - 2005 data; Only national roads data are officially released after 2005 (Public Works); Singapore - 2007 (ASEAN)

The Philippines spends a lower percentage of GDP on infrastructure than competing ASEAN economies, as shown in Figure 66. After reaching a low of 1% in 2005, the percentage increased to 2.1% of GDP in 2009 (see Figure 67). If spending on infrastructure continues to remain low, efficient modern infrastructure will not be built fast enough to meet the challenge of being an archipelago with a high and rising urban population density.

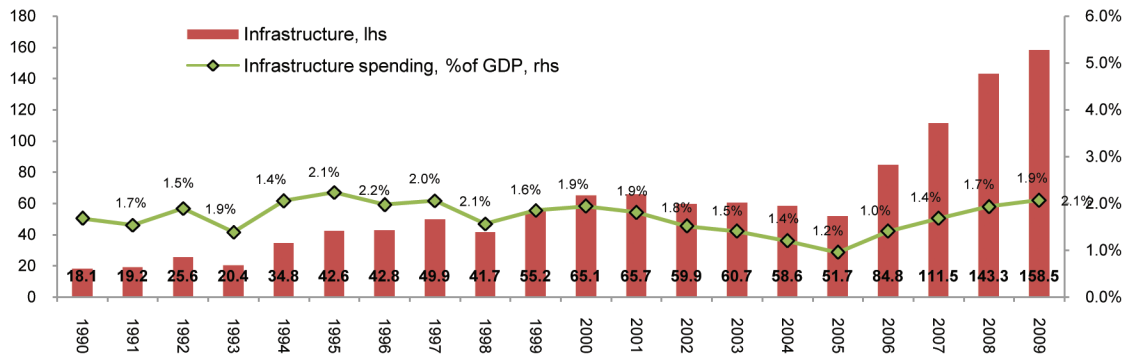
**Figure 66: Infrastructure spending, ASEAN-5, % GDP, 1980-2009 (annual average)**



Sources: BusinessWorld May 13, 2010 (Other countries, per DOF Usec Beltran's statement) and DBM (for the Philippines)

<sup>54</sup> While 70% of the national roads are paved, only 14% of the local roads, which comprise 85% of the total road network, are made of concrete or asphalt.

**Figure 67: NG Infrastructure spending, Philippines, 1990-2009**



Source: DBM, obligation basis; Note: Other capital outlays include capital transfers to LGUs (20% of IRA allocation for development projects), special shares to LGUs and other capital outlay items not classified elsewhere.

Inadequate funding for infrastructure during the last decade contributed to the weakened competitiveness ratings for the country’s overall infrastructure as well as the continued listing of poor infrastructure as a major weakness in its investment climate. Despite the availability of external private and public sector financing, the government was unable to implement significant Public Private Partnership (PPP) projects nor could it avail of significant sums of low-interest loans for infrastructure from China. A lack of transparency and extraordinary levels of public controversy characterized what in most countries is routine infrastructure project development and implementation.

The administration of former President Macapagal-Arroyo in 2003 began a policy initiative to improve inter-island connectivity through the RORO Road Terminal System (RRTS). In her 2006 SONA former President Macapagal-Arroyo highlighted more than 400 projects (mostly related to air, ground, and marine transport) targeted for completion before the end of her term in 2010.<sup>55</sup> Some of the projects were criticized as politically motivated to dissuade congressmen from supporting an impeachment motion against the president.

The overall infrastructure record of the outgoing administration is weak, considering it had almost ten years to complete projects. It neglected to start many major projects and to utilize several which were completed. The administration expropriated the privately-owned international passenger terminal at the national gateway airport in December 2004. The Philippine-German joint venture that built the terminal has not been compensated after more than five years, despite the assurances of the Philippine government that all issues would be settled expeditiously. There are new ports in Batangas and Subic which are hardly used. The Department of Transportation took seven years to approve a US\$ 1 billion light rail project in Metro Manila. For ten years it was unable to decide how to bid and award another large light rail project. Manila residents paid a terrible price in lives and property when one typhoon’s torrential rains proved the high risk of neglecting

<sup>55</sup> Subsequently, the president issued several executive orders creating an Infrastructure Monitoring Task Force to oversee implementation of the projects and then renaming the Task Force as the Pro-Performance System Steering Committee and adding private sector representatives. The Presidential Management Staff serves as secretariat.

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flood control infrastructure and unregulated urban sprawl. Maritime safety remains a major issue, highlighted by many small and several large disasters. Power blackouts became frequent in the Visayas and Mindanao in 2010.

The Philippines faces urgent infrastructure challenges. The most urgent is assuring an adequate supply of power, eventually reducing its cost through increased competition among generators. The second is improving the efficiency of transportation, by air, land, and sea, which is too crowded for a population growing in size and spending power. A third is the water supply, which is not enough for drinking and farming and too much during typhoon season, as well as poor sanitation and solid waste disposal systems. By contrast, telecommunications services, in the hands of competing private sector providers, are much improved following reforms initiated by President Ramos in the 1990s.

The three following tables list major infrastructure projects of both the public and private sectors. The projects in each are listed by category as airport, power, rail, road, seaport, telecommunication, and water. The tables cover three different time periods, with the later including several projects still at the conceptual stage.<sup>56</sup>

- Table 28: Completed projects (2001-2010)
- Table 29: Under construction or being financed in 2010
- Table 30: Priority future projects (2011-2020)

**Table 28: Major infrastructure projects completed, 2001-2010**

Project	Financing	Cost Est. Mn US\$	Year completed
<b>AIRPORTS</b>			
Bacolod-Silay Airport	DOTC	81	2008
DMIA (Clark) Terminal Expansion/Radar	CIAC	11	2008
Iloilo Airport	DOTC	175	2007
NAIA (Manila) Terminal 3	BOT <sup>57</sup>	640	2008
<b>POWER</b>			
Mindanao coal STEAG (232 MW)	BOT	305	2006
North Negros geothermal PNOG (49 MW)	GOCC	155	2007
Panay coal Global Power (164 MW)	private	164	2010
Sibulan hydro HEDCOR (43 MW)	private	109	2010
Toledo coal CEDC (2 x 82 MW)	private	328	2010
<b>RAIL</b>			
LRT-1 North Extension	DOTC	140	2010
LRT-2 Light Rail	DOTC (JBIC)	1,000	2004
South Rail Commuter (Tutuban-Sucacat)	PNR (ROK)	50	2010

<sup>56</sup> Sources for the three tables vary but include media reports and government websites, data from the Pro-Performance System Steering Committee secretariat and industry experts. Project costs are approximated in dollar terms and may not reflect actual peso costs because of exchange rate conversion variations.

<sup>57</sup> Expropriated by the Philippine Government in 2004; the final amount of compensation due to the German-Filipino joint venture owner (\$64 million has been paid) has been undergoing arbitration at the International Chamber of Commerce International Court of Arbitration in Singapore for several years, with final approval to be made by a Philippine court.

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**ROADS**

Bohol Circumferential Road	DPWH	50	2006
Southern Luzon Expressway (SLEX) widening/expansion	BOT	200	2010
Southern Tagalog Arterial Road (STAR) 2 (Lipa-Batangas City 2 lanes)	BOT	55	2008
Subic-Clark-Tarlac Expressway (SCTEX)	BCDA (JBIC)	500	2008

**SEAPORTS**

Batangas International Container Terminal	PPA (JBIC)	120	2007
PHIVIDEC International Container Terminal	PPA (JBIC)	85	2004
RO-RO Road/Terminal System (12 projects)	PPA	14	2006-2008
Subic Bay Port New Container Terminal 1	SBMA (JBIC)	215	2007
Subic Bay Port New Container Terminal 2	SBMA (JBIC)	160	2008

Sources: Pro-Performance System Steering Committee, company and government websites, media reports, and direct verification

**Table 29: Major infrastructure projects underway,<sup>58</sup> 2010**

Project	Financing	Cost Est. Mn US\$	Status
<b>AIRPORTS</b>			
Caticlan, Panay	Private	56	2012-2014
DMIA Passenger Terminal Expansion	CIAC	8	late 2010
San Vicente, Palawan	DOTC	13	2010
<b>POWER</b>			
Ambuklao hydro rehab SNAboitiz (70MW)	private	280	late 2010
Bacman geothermal rehab EDC (110 MW)	private	208	2012
Bukidnon biomass Global Green (35 MW)	private	84	2012
Calaca coal rehab DMCI (320MW)	private	320	early 2011
Iloilo biomass Global Green (17.5 MW)	private	42	2012
Mariveles coal GNPowder (600 MW)	private	600	2012
Naga, Cebu coal KEPCO Salcon (200 MW)	private	400	2011
Nasulo geothermal EDC (20 MW)	private	50	2013
Nueva Ecija biomass Global Gr (17.5MW)	private	42	2012
Toledo coal CEDC (1 x 82 MW)	private	164	2011
<b>RAIL</b>			
MRT-7	PPP	1,200	2014
North Rail Phase 1	GRP (PRC)	500	2012
North Rail Phase 2	GRP (PRC)	500	NIA*
<b>ROADS</b>			
Cavite Coastal Road extension	PPP	NIA	Stalled
Manila Skyway Phase 2	private	400	late 2010
NLEX to C-5 Connector	Public	31	2010
NLEX to Tondo Connector	Private	NIA	NIA
SLEX to STAR (Calamba-Sto Tomas)	Private	NIA	2010
TPLEX (Tarlac to La Union ) (89 kms)	PPP	400	2014
<b>SEAPORTS</b>			
RO-RO terminals and road connections	public	NIA	NIA*
<b>WATER</b>			
Manila Aqueduct	MWSS	117	2014

Sources: Pro-Performance System Steering Committee, company and government websites, media reports, and direct verification \*NIA stands for no information available.

<sup>58</sup> Underway includes projects undergoing financing and under construction.

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Table 30: Major infrastructure projects to implement, 2011-2020

Project	Financing	Cost Est. Mn US\$	Status
<b>AIRPORTS</b>			
Cebu airport terminal expansion	DOTC	NIA	NIA
Coron terminal and runway expansion <sup>59</sup>	DOTC	NIA	NIA
DMIA Passenger Terminal 2	CIAC	200	USB <sup>60</sup>
NAIA Terminal 1 modernization	NAIA	NIA	NIA
Puerto Princesa terminal expansion	DOTC	NIA	NIA
<b>POWER</b>			
Angat hydro rehab Korean Water (28 MW)	private	28 <sup>61</sup>	NIA
ASEA One biomass (4 in Visayas) (72MW)	private	180	2013
Binga hydro rehab SNAboitiz (120 MW)	private	120	late 2013
Bukidnon biomass Global Green (36 MW)	private	36	2012
Burgos wind (116 MW)	private	230	2011
Conal coal, Sarangani (200 MW)	private	200	2012
Ilijan CCG expansion KEPCO (300 MW)	private	300	NIA
Kalayaan expansion CBK (360 MW)	private	360	2013
Leyte-Surigao transmission upgrade	private	NIA	NIA
LNG facility and power plant	private	NIA	NIA
Magat hydro expansion SNAboitiz (180MW)	private	360	NIA
Mindanao hydro privatization/rehabilitation (101 MW)	private	NIA	NIA
Mt. Apo III geothermal EDC (50 MW)	private	138	2014
Nuclear power (2 x 600 MW)	private	5,000	NIA
Pagbilao coal expansion (350 MW)	private	350	2015
Pantabangan-Masiway hydro expn (112MW)	private	224	NIA
Quezon Power coal expansion (500 MW)	private	500	2015
Rangas geothermal EDC (40 MW)	private	100	2015
Redondo coal Aboitiz/Taiwan Cogeneration (300 MW)	private	550	2013
Sabangan hydro Aboitiz (28MW)	private	56	NIA
San Gabriel gas FPP (550 MW)	private	550	2013
Semeria large coal plant (1,200 MW)	private	1,200	NIA
Sita hydro Aboitiz (42MW)	private	84	NIA
Sorsogon-Samar transmission connection	private	NIA	NIA
Tanawon geothermal EDC (40MW)	private	100	NIA
<b>RAIL</b>			
Cebu LRT	DOTC	NIA	NIA
High speed rail Clark to NCR CBDs	PPP	5,000	NIA
LRT-1 south extension Phase 1	PPP	1,400	NIA
LRT-1 south extension Phase 2	PPP	1,000	NIA
LRT-2 east and west extension	DOTC	350	NIA
LRT-4	PPP	1,000	NIA
LRT-8	PPP	1,000	NIA
North Rail extension north of Clark	PNR	500	NIA
South Rail rehabilitation to Bicol	PNR	500	NIA
<b>ROADS</b>			
Cavite-Laguna (CALA) Expressway (23km)	DPWH	300	NIA
Cebu-Mactan 3rd bridge	NIA	NIA	NIA
Cebu-Bohol bridge (18 km)	NIA	NIA	NIA
Davao to General Santos expressway	DPWH	NIA	NIA
Danao to Talisay expressway, Cebu	DPWH	NIA	NIA
LRT 1 provincial bus terminal to Cavite <sup>62</sup>	PPP	290	NIA

<sup>59</sup> Any policy to declare Coron and Puerto Princesa as pocket open skies airports should include upgrading each airport's infrastructure to international standards including international flight rules (IFR) capabilities.

<sup>60</sup> Unsolicited bids have been submitted.

<sup>61</sup> Power generation cost estimates assume US\$ 1 million per MW for coal and gas, US\$ 2 million for hydro and wind, US\$ 2.4 for biomass, and US\$ 2.5 million for geothermal and nuclear.

<sup>62</sup> Provincial bus operations to and from the North and South could start and terminate at these bus terminals. The light rail system will provide inter-modal connectivity to and from the metropolis.

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Manila Connector (Skyway to Tondo)	PPP	400	NIA
Metro Manila Tollway C-6 (Lakeshore Dike to NLEX)	DPWH	850	NIA
MRT 7 provincial bus terminal to Bulacan	PPP	NIA	NIA
NAIA Expressway (Phase 2) (NAIA to Coastal Road)	NIA	NIA	NIA
North East Luzon Expressway (456 km)	PPP	190 <sup>63</sup>	NIA
SLEX 4 (Calamba-Lucena)	PPP	450	NIA
STAR northbound lanes Lipa-Batangas City	PPP	NIA	NIA
<b>SEAPORTS</b>			
Batangas/Subic international container port utilization <sup>64</sup>	DOTC	NIA	NIA
Complete RO-RO with terminals	DOTC	NIA	NIA
Hub port facilities in regions	PPP	NIA	NIA
Manila cruise ship terminal	PPP	NIA	NIA
<b>TELECOMMUNICATIONS</b>			
Broadband, higher-speed expansion	private	2,000	NIA
National government data center & website	DICT	NIA	NIA
Wi-fi in large cities	PPP	NIA	NIA
<b>WATER</b>			
Cebu Bulk Water Manila Water (35 MLD)	PPP	NIA	NIA
Manila Aqueduct	MWSS/PRC	117	2013
Manila Bulk Water Laiban (1,900 MLD)	MWSS	630	NIA
Manila Bulk Water Sierra Madre (500MLD)	MWSS	165	NIA
Manila Bulk Water Wawa (550 MLD)	MWSS	180	NIA

Sources: *Pro-Performance System Steering Committee, company and government websites, media reports, and direct verification*

*Arangkada Philippines 2010* does not analyze or make recommendations for the entire infrastructure of the Philippines.<sup>65</sup> This policy paper focuses on major projects in Central Luzon and the NCR, where most of the country's industry is concentrated and where one of the world's largest urban mega-regions is rapidly expanding (see Table 31). Manila presently is the world's 5th largest urban area with an estimated population of 20.8 million in 2010. By 2030 Manila is projected to be the world's 3rd largest urban area (after Jakarta and Tokyo-Yokohama) with a projected population of 34 million inhabitants. An increase of 13 million residents will require very large investments, not just to maintain the current poor condition of infrastructure but to achieve substantial modernization to improve national competitiveness.

<sup>63</sup> US\$ 190 million for Phase 1 6-lanes Quezon City to Baliuag, Bulacan; subsequent phases will traverse Nueva Ecija north to Tuguegarao, Cagayan.

<sup>64</sup> *Arangkada Philippines 2010* recommends a policy to decongest Manila Port by gradually shifting international container traffic to the ports of Batangas and Subic to utilize the completed facilities at both ports for international container shipping.

<sup>65</sup> The World Bank's extensive 2005 study "Philippines: Meeting Infrastructure Challenges" contains data and recommendations still valid. More recently, the Philippines-Australia Partnership for Economic Governance Reforms (PEGR) prepared the Draft National Transport Policy Framework document dated October 30, 2009.

**Table 31: Population of Urban Mega-regions, 2010 and 2030 (E)**

Urban Area	2010 population, mil	Land sq. km	Density pop'n /sq.km.	2030 population estimate, mil
Tokyo-Yokohama	35.200	8,677	4,057	36.035
Jakarta	22.000	2,590	8,494	37.040
Mumbai, MAH	21.255	777	27,355	31.360
Delhi, DL-HR_UP	20.995	1,425	14,733	32.800
Manila	20.795	1,425	14,593	34.135

Source: Demographia. 2010 World Urban Areas and Population Projections. Jul. 2010.

Tokyo-Yokohama includes large areas Tokyo, Kanagawa, Chiba and Saitama prefectures and small areas of Gumma, Tochigi and Ibaraki prefectures.

Urban area of Jakarta includes Jakarta, and urban areas of regencies of Tangerang, Bekasi, Bogor and Karawang and the cities of Bekasi, Depok and Bogor.

Mumbai includes Kalyan, Bhiwandi, Virar, Vasai and Panvel.

Delhi includes Faridabad, Ghaziabad, Noida and Gurgaon.

Urban area of Manila includes Metro Manila and urban areas of Bulacan, Cavite, Laguna, Rizal and Quezon provinces.

#### COMPONENTS OF QUALITY MODERN INFRASTRUCTURE: CENTRAL LUZON

- An extensive, seamless **limited access road** network
- An extensive, seamless **light rail** network
- North and South **heavy rail** lines for passengers and cargo
- Two international **airports with modern terminals and high-speed rail** connection (NAIA and DMIA) extendable to Batangas and Subic
- Three **seaports with competing operators** (a decongested Manila with international cargo moved to Batangas and Subic)
- Reliable, more affordable **electric power**
- Reliable **water supply** and **flood control**
- Reliable, low-cost state-of-the art **telecommunications** with high-speed broadband and free public wireless coverage

Source: Presentation of John Forbes at a Transportation Workshop, January 15, 2010

Many of the recommendations made for the Seven Big Winner sectors require infrastructure in the country's other urban centers and rural areas. The Agribusiness sector needs better farm-to-market roads and post-harvest facilities, including cold chain storage, and ports. Mining require better roads and ports. Interisland shipping needs to be safer, more efficient, and less costly. Most of the country's most attractive tourist destinations need better air and sea access, improved roads, water, and sanitation. Increasing business processing investment at secondary and tertiary cities requires dependable telecommunication links, while reliable and lower-priced power is essential for the entire economy.

Turning this vision into reality in a decade can be possible if recommendations in the following sections are implemented. Funding in the tens of – perhaps as high as one hundred – billions of dollars will be needed (see Table 32). Such large amounts of funding are not available from the public sector and ODA, but can be provided by the private sector, both domestic and foreign,



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investing in PPPs. However, private investors will only participate in well-prepared projects in an investment climate that provides them contractual and regulatory confidence of fair returns on their equity.

**Table 32: Infrastructure funding gap (Bn PhP), 2003-2010**

Period	GDP (Current Prices)	Public Sector Infra Budget	Required Infra Spending at 5% of GDP	Infra Funding Gap at 5% of GDP	% Gap
2003	4,316	124	216	92	2.1%
2004	4,872	106	244	137	2.8%
2005	5,444	117	272	155	2.8%
2006	6,031	141	302	161	2.7%
2007	6,647	163	332	169	2.5%
2008	7,423	206	371	165	2.2%
2009	7,669	239	383	144	1.9%
2010	8,221	211	411	200	2.4%

Source: DBM

In the following pages, Arangkada Philippines 2010 presents recommendations developed at three FGDs on infrastructure hosted by the American Chamber of Commerce: (1) Airports and Seaports, (2) Power and Water, and (3) Road and Rail. With some exceptions, recommendations focus on the geographic area from Batangas north to La Union province, an area with a population of over 36 million and the highest PCI in the country at about US\$ 2,468.<sup>66</sup>

“The Philippines is not just in a state of power crisis, or water crisis, it’s in a state of infrastructure crisis. It is not just the blackouts and lack of water the next president should worry about. It’s everything else—deteriorating roads, major railways not being built, a nautical highway that has one of the world’s worst safety record (more than 200 maritime accidents every year), and an international airport that is a national embarrassment—to put it mildly. And one that’s been so for eight long, unnecessary years.”

*Peter Wallace, Manila Standard, April 23, 2010*

“We will level the playing field for businesses. We will encourage free and fair competition in a level playing field that stresses that one need not be a crony in order to be successful in this country. We will make our bidding and procurement policies and processes more transparent, and punish those who seek to circumvent procurement laws through collusion and other illegal means.”

*Benigno Simeon Aquino III, www.noyonoy.ph, accessed May 5, 2010*

<sup>66</sup> Per capita income is computed using the 2008 Regional Gross Domestic Product (RGDP) of NCR and regions 1-4 divided by the 2008 population estimates of NSO covering the said regions. 2008 RGDP data are the latest figures available. The average exchange rate in 2008 which is PhP 44.4746 per US\$ (BSP) was used to convert the value in current dollar terms. Total population of the area was computed by simply summing up the 2010 population estimates of NSO for the provinces of La Union, N. Vizcaya, Quirino, Pangasinan, Tarlac, N. Ecija, Aurora, Zambales, Pampanga, Bulacan, Bataan, NCR, Rizal, Cavite, Laguna, and Batangas.

“What we Filipinos should realize is the need for logical continuity in long-term infrastructure, and not these outright reversals and constant changes.”

*Gilbert Teodoro, GMA News.TV, March 4, 2010*

Gilberto Teodoro said the construction of a Cebu-Bohol bridge will be given immediate attention if elected into office. The anchors of the bridge will be Getafe and Cordova towns in Bohol and Cebu, respectively. Passing through shallow waters, the bridge is estimated to be 18 kilometers long.

*Philippine Star, January 22, 2010*

Manuel Villar, Jr. said all infrastructure projects would be bid out in the first year of his administration so that the next five years would be devoted to construction and project monitoring. He cited in particular the interconnection of NLEX and SLEX, and the extension of NLEX from Pampanga up to La Union.

*Business World, accessed May 5, 2010*

“I am pushing for a live broadcast of the procurement processes of the government... This will have two desirable effects: first, it can minimize if not totally eliminate corruption in bidding out government contracts, and second, it would educate the citizenry on some important aspects of government operations.”

*Manuel Villar, Jr., www.senate.gov.ph, January 15, 2010*

### Reforming the Infrastructure Policy Environment<sup>67</sup>

#### Legal issues

- *Build-Operate-Transfer (BOT) Law*

The BOT Law (RA 6957), enacted in 1990 and amended in 1994 (RA 7718), is the legal framework for BOT and PPP projects. However, there is no single government agency in charge of BOT/PPP planning and project preparation, and very little is said in the law about the role of the government for project planning and preparation, principles and policies on risk sharing, and risk allocation.

- *Unsolicited Proposals*

Too many contracts are awarded under the unsolicited mode. RA 7718 states that the government may accept unsolicited proposals provided that the project involves a new concept or technology,

<sup>67</sup> Of the three FGDs devoted to infrastructure, the Road and Rail FGD spent considerable time discussing more general infrastructure policy issues applicable to most sectors. The recommendations are included here and the discussion specific to road and rail projects appears after the section on “Power.”

requires no government funding, and/or is not part of the list of priority projects. Projects have been removed from the priority list to qualify for unsolicited proposals. The timeframe for developing a proposal under Swiss challenge (i.e. 30 days) is too short.

- *Joint Venture Agreements (JVA)*

The head of a government agency has full authority to sign a JVA. This process lacks transparency and competition. The public becomes aware of the project only after the agreement is done, and terms of the agreement are not usually disclosed. Other government agencies (e.g. DBM, DOF) learn of the project only when funds need to be released. NEDA has no oversight role in the approval process. The JVA has become a preferred mode of private sector participation in infrastructure projects, as the approval process is significantly shortened, and oversight is almost nonexistent.

- *Foreign Equity Restrictions*

In the Government Procurement Reform Act (RA 9184), a 25% cap on foreign equity is imposed on some infrastructure projects. In some projects where security is an issue, foreign equity is reduced to zero. Some projects require advanced technologies that may not be locally available. Foreign companies can provide such technologies but their participation is limited and opportunities to partner with local companies are limited.

### **Project Planning, Prioritization, and Approval**

- *Long Term Planning*

There is lack of long-term planning for infrastructure development. Usually, project duration is co-terminus with the term of an administration. New projects that cannot be completed towards the end of a presidential term are no longer implemented nor prioritized.

- *Lack of Technical Capability to Plan and Prepare BOT Projects*

The government has not demonstrated the technical capacity to plan and prepare documents for potential BOT and PPP projects. As a result, many projects encounter problems that delay implementation and sometimes lead to cancellation.

The government must have the capacity to determine which projects are commercially viable for the private sector. At present, there is a BOT office in the DTI, but it has very limited staff and inadequate technical capabilities and financial resources. Project preparation requires technical expertise, commitment, and an adequate budget for the preparation of feasibility studies, bid terms of reference, etc.

The role of government is not limited to preparing the list of priority projects but extends to the preparation of necessary documents to make the BOT process work. For example, government hastily identified the Panguil Bay Bridge project in Mindanao for BOT financing without the benefit

of a feasibility study. Three years later, the Department of Public Works and Highways (DPWH) determined it was not commercially viable for the private sector.

Senior government officials present brochures and power point presentations in meetings and conferences showing Potemkin-like projects “offered” to the private sector.<sup>68</sup> When the private sector enquires about their details, including bidding schedules, answers are evasive.<sup>69</sup> However, when projects are viable and well-prepared and the process is transparent, investors and lenders will come in (see “Transparency in Procurement and Implementation” below).

- *Politicized Project Prioritization*

The Office of the President has great discretionary power regarding the release of Countrywide Development Funds (CDF), which are often used to reward political support. A study shows that only 38% of CDF infrastructure projects came from Highway Development and Management Version 4 (HDM-4) generated projects.<sup>70</sup> Most (62%) are politically determined. HDM-4 is a framework that allows for the systematic prioritization of infrastructure projects. The CDF originated after the 1987 elections with an allocation of one million pesos per representative and has increased to PhP 70 million. Each senator is allocated PhP 200 million. These amounts are usually budgeted annually.

### **Slow Project Approval**

Infrastructure project approval in the Philippines is very slow. Investors have to wait a minimum of five years before a project is approved. Immense time and effort are needed from the start of the planning stage to approval. Inefficiency adds to project expenditure, raising the cost of doing business and the cost of the project itself. To prove that the GRP is serious in improving infrastructure, there is a need for a faster, yet still reliable, project approval process.

### **Infrastructure Budget and Release**

- *Congress re-allocates the DPWH budget*

Congress inserts, deletes, and realigns some of the projects submitted under the president’s National Expenditure Proposal submitted to Congress each year. The list of approved projects in the General Appropriations Act (GAA) usually differs from the NEP. However, OP-DBM may

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<sup>68</sup> Potemkin refers to a pretentiously showy or imposing façade intended to mask or divert attention from an embarrassing or shabby fact or condition (Random House Unabridged Dictionary, 1997).

<sup>69</sup> The former Secretary of Finance and the former Acting Director General of NEDA presented projects at the April 2008 Philippine Development Forum (PDF) at Clark. The same projects were presented at the Wallace Business Forum in Makati by the DTI Secretary in December 2008. At both fora the private sector was asked to invest, but JFC members were unable to obtain details of the bidding schedule in follow-on enquiries with government agencies.

<sup>70</sup> HDM-4 provides a powerful system for road management, programming road works, estimating funding requirements, budget allocations, predicting road network performance, project appraisal, policy impact studies, and a wide range of special applications. Its development was sponsored by international funding institutions and supported by national governments, and other organizations, particularly: Department of International Development, UK; World Bank; Asian Development Bank; and the Swedish National Road Administration ([www.hdmglobal.com/AboutHDM4.htm](http://www.hdmglobal.com/AboutHDM4.htm)).

impound the appropriated budget for some projects (listed in the GAA) and realigned to other projects (proposed by political allies).

- *Delayed submission of project requirements*

Payment of claims by the government is subject to submission of complete supporting documents. In foreign-funded projects, submission of all required documentation must be completed within the loan period for the financial institution to release funding. When delayed, all payables are borne by the GRP. This imposes an additional burden to its limited budget.

- *Delayed release of funds*

A major cause of delayed implementation is the slow release of funds by DBM to implementing agencies.

### **Lack of Transparency in Procurement and Implementation**

Transparency is a problem in almost all types of government infrastructure projects – whether JV, BOT, or government funded – and at all levels of government. Resources are misallocated. There were two large tollway projects where variation orders worth a few billion pesos were approved, and the public was not informed. Even the Congress in its oversight function has only very limited access to accurate information.

The Freedom of Access to Information Act (when enacted) will require disclosure of details of government transactions, such as infrastructure projects. It allows the public to request further information from the responsible government agency. In other countries, such as the US, there is a Federal Register where hundreds of government actions are published online for stakeholder input. If the government does not comply, its actions may be subject to post-hoc judicial challenge.

DPWH and DBM are already required to post on their websites information on major projects (e.g. the project amount, releases, expenditure, information of contractors and suppliers, etc.). But this is not followed in practice, especially for Congressional infrastructure projects. When agencies such as the DPWH and DBM are asked about non-disclosure of their projects, they respond that the information is “sensitive.” Information on suppliers and contractors is also not disclosed with government agencies explaining doing so would infringe on their “privacy.”

### **Lump sum and Congressional Allocations**

Some projects cannot be specifically identified ahead of time; thus the justification for “lump sum” budgeting. Emergency projects such as typhoon and flood control and subsequent infrastructure repair and maintenance cannot be predicted exactly (although the country experiences typhoons and floods every year). Lump sums also include budgets for right-of-way and preliminary detailed engineering.

However, the largest amount of lump sums is classified under Various Infrastructure and Local Projects (VILP) where Congressional allocations are included. Legislators identify specific infrastructure projects for financing under this fund. The amount of lump sum in the 2009 DPWH budget was PhP 25 billion, out of a total capital program budget of PhP 86 billion.

Some projects are deliberately classified under the lump sum budget to make the spending non-transparent. Of the estimated CDF (PhP 70 million per congressman and PhP 200 million per senator), PhP 40 million is spent for hard or infrastructure projects (most of these come under the VILP of DPWH). There is no system that shows how and where money is spent. Sometimes money is spent on “ghost” or non-existent projects. Even within Congress, there is very limited transparency.

### **Cost overruns**

Poor project preparation and implementation can lead to high cost overruns. A major source of additional and unforeseen costs is the non-cooperation of LGUs. In one case, a mayor threatened not to issue a permit for the LRT-1 north extension between Trinoma and Monumento if there would be no station in his city.

### **Risk sharing**

Risk allocation must be defined at the beginning of a project in order to clarify the responsibilities of each party (public and private) in BOT, PPP, and JV projects.

#### **Poor Record of Unsolicited Projects**

Unsolicited proposals have not worked well in the Philippines, whether financed bilaterally or by the private sector. An international financial specialist commented “In the 15 years that I’ve been in the sector, I’ve not seen an unsolicited proposal succeed. And success should be measured not in terms of the contract being signed, but in terms of the project getting financed, built and actually operated.”

Example 1: NAIA IPT-3 has become an international case study in how NOT to do a PPP project. Almost two decades after the project was initiated, the structure has been built, expropriated, and is operating sub-optimally while the ancient terminal it was intended to replace is one of modern Asia’s most dilapidated international gateway facilities.

Example 2: LRT-1 South Extension, badly needed by commuters in fast-growing Cavite, lost its Canadian development partner through right-of-way (ROW) delays. Following this, a WB-IFC proposal was undercut by an unsolicited offer from a Chinese firm with powerful domestic Philippine allies. Without any clear-cut policy to bid out the project, government incompetence and special interests have left commuters stuck in traffic for a decade.

Headline Recommendations	
1.	<b>Double spending on infrastructure to 5% of GDP with a pipeline of PPP projects</b> , professionally prepared and transparently bid and implemented. Draw on international technical assistance to move forward <b>nearly PhP 200 billion in viable road and rail projects</b> . Draw on nearly PhP 1 trillion in available local funds.
2.	<b>Legal and procedural reforms will be needed to revitalize PPP programs</b> . Amend the BOT law and its IRRs. Amend or rescind the JVA EO. Assure that the NEDA-ICC reviews all major projects. Strongly discourage unsolicited project proposals. Remove foreign equity restrictions. Speed up project approval process using timetables/deadlines. Release DBM funds in timely fashion. Use congressional CDF only for needed infrastructure. Create and follow a 10-year infrastructure master plan. Implement the National Transport Plan.
3.	<b>Increase transparency and reduce corruption and controversy over infrastructure projects. Protect investors from political risks (TROs, LGU interference, right of way problems). Pass the Freedom of Access to Information Act</b> . Develop a government on-line registry of projects and a private sector website to monitor the top 200-300 projects against guidelines. Disclose all JVA projects prior to MOA signing.

### Recommendations (25)

- A. **Double infrastructure spending to 5% of GDP with PPP**. Overcome the constraint of low tax collection and the high budget deficit by **harnessing available resources and capacities of the private sector for infrastructure development**.  
(Medium-term action)
- B. Prepare, bid out, award, and **implement with full transparency several large PPP projects** that are already viable. This can **create a pipeline of PPP projects** to attract domestic and foreign investors. (Immediate action NEDA, DOTC, DPWH, DOF, DTI, and private sector)
- C. **Potential pilot PPP projects include two rail and three toll road projects**: LRT-1 South Extension and LRT-2 East Extension and the Cavite-Laguna Expressway, C-6, Expressway and SLEX 4 Calamba-Lucena. Total estimated cost of these five projects is PhP 173 billion. (Immediate action NEDA, DOTC, DPWH, and private sector)
- D. To speed the process, **use foreign technical and financial assistance**; bring in experts who can be “embedded” in line agencies to prepare project bidding, evaluate proposals, and rank proponents with project monitoring to be done at PMS and final decisions made by the cabinet and the president. (Immediate action NEDA, DOTC, DPWH, and DOF)

- E. Use available **domestic capital for infrastructure investment**. Interest rates are low and sustained growth in domestic liquidity indicates funds are available. Special Deposit Accounts and Reverse Repurchase Agreements total **nearly PhP 1 trillion**. (Immediate action private sector)
- F. **Create a coalition** of the Philippine Bankers Association, investment houses, and the Philippine Constructors Association and agree **to promote good projects and good processes** (transparent and competitive). Foster participation between local and foreign contractors, investors, and banks. (Immediate action private sector)
- G. **Amend the BOT Law**. The role of the GRP in planning and preparing infrastructure projects for BOT should be more clearly defined. GRP should determine and identify projects it will undertake and projects to offer to the private sector under BOT/PPP. Increase Swiss challenge timeframe from 30 to 180 days. Pending passage of amendments, review again and issue revised BOT IRRs. (Immediate and medium-term action NEDA, DTI, Congress, and private sector)
- H. **Institute long range planning for infrastructure development**. Plans should not be limited to one president's six-year term of office. Infrastructure project planning should be depoliticized. NEDA should consider a **10-year plan**, rather than encouraging plans, such as its MTDP and MTPIP, which are always for only a single presidential term. (Medium-term action NEDA, implementing agencies, and RDCs)
- I. Government should **minimize removing projects from its PPP priority list**. All priority projects **should be solicited** and awarded through public bidding. Require all major projects to undergo **review by NEDA-ICC**. (Immediate action NEDA and implementing agencies)
- J. Study setting up a **Philippine Infrastructure Facility** with a World Bank (WB) loan, as Indonesia has done. Funds can be sought from donors, insurance companies, OFWs, and others. The fund could support project preparation and promote PPPs, as well as take equity and debt positions in projects. (Medium-term action NEDA and DOF)
- K. **Rescind or amend the EO on JVAs**. Review all JV arrangements and ensure that they are consistent with NEDA Board policy that major projects (over PhP 500 million) should pass through the NEDA-ICC. (Immediate action NEDA and line agencies)
- L. **Require mandatory disclosure of projects under JVA prior to the signing of an agreement**. Adhere to the principle "No decision is valid without pre-signing disclosure." Review rules on risk sharing in the EO on JVAs. (Immediate action NEDA and line agencies)
- M. **Reduce cost overruns due to unsolicited inputs particularly from LGUs**. Clarify the limits of LGU authority regarding national projects, but also include LGUs and local communities in stakeholder consultations to explain project benefits. **Protect investors from political risks (TROs, LGU interference, right of way problems)**. (Medium-term action NEDA, DTI, DILG, LGUs, and line agencies)



- N. **Review foreign equity restrictions on infrastructure** with a view to maximizing foreign participation. (Immediate action NEDA, DTI, and DOJ)
- O. **Implement the National Transport Policy Framework and the National Transport Plan (2011-2016)** that were prepared with the support of Australian Agency for International Development (AusAID). (Medium-term action NEDA and line agencies)
- P. **Build technical and legal capabilities of government agencies to prepare BOT projects**, to have technical expertise to determine viability of BOT projects, to prepare feasibility studies, and to better allocate risks. More funding and technical assistance should be made available for such capacity building. (Medium-term action NEDA, DTI, line agencies, and private sector)
- Q. **Government should create reasonable timetables to address the long registration period of BOT projects.** Upon submission of a proposal, there should be a 90-day deadline for approval. Information should be on agency websites with credible explanations when deadlines are not met. (Immediate action NEDA and DTI)
- R. **CDF should be utilized for necessary infrastructure projects and not follow political considerations.** Strictly use HDM-4, which identifies and prioritizes project funding using objective technical and economic criteria. (Medium-term action DBM, DPWH)
- S. Process and **submit supporting documents during the loan period** prior to expiration of loan, so the financing agency shares payment of obligations. (Medium-term action NEDA, DBM, DPWH, and private sector)
- T. **DBM should release funds on time** to meet contractual obligations and diminish the backlog of payment obligations. (Medium-term action DBM)
- U. Continue and **strengthen the Pro-Performance Team** that monitors infrastructure project implementation. (Immediate action OP and PMS)
- V. **Pass the Freedom of Access to Information Act.** There should be a complete commitment to transparency. Create penalties for non-compliance of disclosure requirements and implement thoroughly. (Immediate action Congress)
- W. **Develop an on-line registry for information on infrastructure projects.** Require permanent and updated online disclosure for priority projects, including timeline, status of project, proposed and actual expenditure, variation orders, etc. Foreign technical assistance should be requested to create a website to track major projects. When the Freedom of Access to Information Act is passed, it will be mandatory for government to fully disclose transactions. (Immediate action NEDA, DBM, and COA)
- X. The **private sector can also create a website tracking the top 200-300 large infrastructure projects**, or find an independent government agency to create such a website (e.g. NEDA) without a need for legislation or an EO. (Immediate action private sector and NEDA)

- Y. **Lump sum budgets should be kept to a minimum**, if not totally avoided, in order to promote transparency and accountability. (Immediate action DBM and DPWH)



Road and Rail FGD Participants, Moderator and Secretariat Members

**November 12, 2009**

**Joint Foreign Chambers of the Philippines  
FOCUS GROUP DISCUSSION ON ROADS AND RAIL<sup>71</sup>**

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<sup>71</sup> The FGD on Road and Rail spent much of its time discussing reforms in process, resulting in the recommendations listed above. It also discussed roads and rails, and its recommendations for these are described under the Road and Rail section below. Its members included several former senior officials and investors with considerable experience in the Philippines who made valuable contributions.