POLICY INSIGHTS

Senate Economic Planning Office

November 2007

Removing Regional Disparity in Infrastructure Development

A Probe into the Proposed 2008 Budget

The proposed 2008 budget is marked by a significant increase in real infrastructure spending as a percentage of the national government budget, from 8.41 percent in 2007 to 9.45 percent in 2008. This demonstrates the government's strong commitment to improve infrastructure in the country. The realization of these planned investments, however, is contingent on the attainment of the government's revenue targets and on the sustained growth of the economy.

I. Introduction

1.1 The national budget is a plan which spells out the socio-economic development agenda of the government and reflects its highest level of political commitment in a given year. As such, it identifies sources of revenue and allocates expenditures to government programs based on the priorities in the development agenda. For 2008, the proposed total expenditure program amounts to P1.227 trillion-- 8 percent or P91 billion higher than this year's budget of P1.136 trillion. The proposed expenditures will be funded through revenues projected at P1.236 trillion -- P1.11 trillion in tax revenue and P127.3 billion in non-tax revenue. Out of the P1.227 trillion budget proposal, P770.7 billion of New General Appropriations is proposed for enactment in 2008. A standby authority for P114.5 billion of Unprogrammed Appropriations will be provided to be released only when revenue collections exceed revenue targets.

1.2 This paper aims to look into the expenditure program of government particularly on infrastructure for 2008. Specifically, it will attempt to review whether or not the prioritization of infrastructure projects of government is coherent with the developmental needs of the regions and provinces. This paper will use in its analysis both primary and secondary data including results of related studies.

1.3 The paper proceeds with a review of the macroeconomic performance of the country and its ramifications on the present fiscal situation, which serves as basis for the proposed 2008 budget. The third part of the paper focuses on the proposed infrastructure spending of the government being one of its big ticket programs for 2008. The last part will present suggestions on budget and planning reforms.

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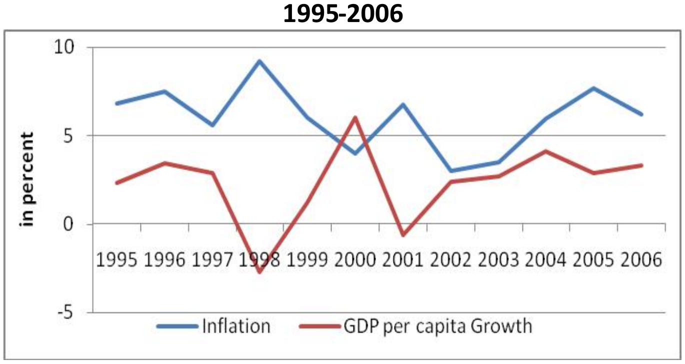
II. Macroeconomic Review and 2008 Budget Dimensions

2.1 The Philippine economy has been dominated by a boom-bust cycle, making it difficult for the country to sustain higher than 5 percent gross domestic product (GDP) growth. Between 2004 and 2006, however, sound macroeconomic and fiscal reforms yielded a rather impressive performance in the economy. GDP grew by an annual average of 5.5 percent, the first time since the 1970s that a three consecutive years of growth of over 5 percent was posted.

2.2 The robust GDP growth continued in 2007 as the economy grew by 7.5 percent in the 2nd quarter, the fastest rate in two decades, bringing to 7.3 percent the average growth rate for the first semester of the year. Industrial growth, particularly in the mining and quarrying, and construction subsectors, fueled the growth for the first semester along with the sustained expansion in the services sector. On the expenditure side, private consumption, which comprises 78 percent of GDP, continued to be the key growth driver, boosted by the strong inflow of overseas remittances and election-related activities. A remarkable expansion in capital formation and increased government consumption were also seen as investments and government spending grew by 7.5 percent and 11.7 percent respectively in the first half of 2007 compared to 0.9 percent and 5.5 percent, respectively, during the same semester in 2006.

2.3 In per capita terms, GDP increased significantly from negative 1 percent in 2001 to 3 percent in 2006. Nonetheless, inflation rate remained higher than the growth in per capita GDP. While the past 10 years saw inflation rate significantly declining from a high of 9.2 percent in 1998 to only 6.2 percent in 2006, increases in the price level, except in 2000, were always higher than the growth in real per capita GDP by an average of 3.7 percent. This suggests that the people's purchasing power did not improve despite growth in income.

Figure 1. GDP Per Capita Growth versus Inflation Rate: 1995-2006



Source: NSCB

2.4 For 2008, the baseline scenario of the 2008 budget is contingent upon the continued macroeconomic stability in the economy. GDP is expected to grow by 6.1 percent to 6.8 percent next year while inflation is seen to stay within the 3 to 4 percent range. The peso is expected to trade between P46-48 against the dollar. As of October, peso-dollar exchange rate hovers at an average of P46.8 to the greenback.

2008 Revenue Program

2.5 The passage of measures, which increased the "sin" taxes and reformed the value-added tax (VAT), is arguably one of the major achievements of the 13th Congress as it led to the significant increase in the country's tax effort from 12.8 percent in 2002 to 14.3 percent in 2006. Prior to 2005, the tax effort of the national government has steadily declined after hitting a high 17 percent in 1997 when the Comprehensive Tax Reform Program (CTRP) was implemented.

Table 1. Macroeconomic Assumptions: 2006-2008

Particulars	2006	2007	2008
GNP growth (%)	6.1	6.2 - 7.1	6.3 - 7.1
GDP growth (%)	5.4	6.1 - 6.7	6.1 - 6.8
Inflation, CPI (2000=100)	6.2	2.6 - 3.1	3.0 - 4.0
91-Day Treasury Bill Rate (%)	5.4	3.1 - 3.9	4.0 - 5.0
Foreign Exchange Rate (P/$)	51.31	46 – 48	46 – 48
Dubai Oil Price (US$/bbl)	61.48	61 – 64	62 – 70
Exports, growth rate	14.6	11.0	11.0
Imports, growth rate	10.6	10.0	11

Source: BESF 2008

2.6 Even when adjusted for inflation, the growth of tax revenue showed a remarkable improvement. The rate at which real tax revenue has been increasing from 2005 to 2006 was higher compared with the inflation rate (Figure 2). Sources of revenue growth for this period were Sales Tax and VAT for the Bureau of Internal Revenue(BIR) and VAT on imports for the Bureau of Customs (BoC).

2.7 The improved revenue collection starting 2005, in part, led to the considerable decline in the fiscal

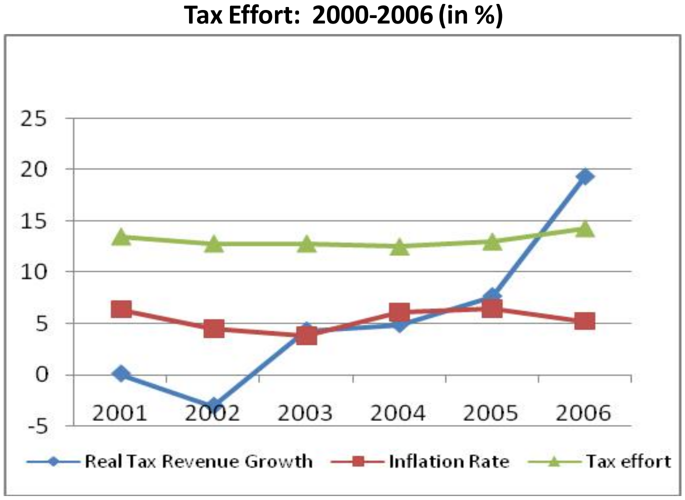
Table 2. Revenues and Expenditures: 2002-2008

Particulars	2002	2003	2004	2005	2006	2007[a/]	2008[p/]
Revenues (in billion pesos)	**578.4**	**639.7**	**706.7**	**816.2**	**979.6**	**1,118.8**	**1,236.2**
Percent Growth	1.9	10.6	10.5	12.3	20.0	14.2	10.5
% of GDP	14.6	14.8	14.5	15.1	16.3	16.9	17.0
Revenues by Collection Agency							
BIR (in billion pesos)	402.7	427.4	470.4	542.7	652.7	765.9	845.0
Percent Growth	3.6	6.1	10.1	10.5	22.7	17.3	10.3
% of GDP	10.2	9.9	9.7	10.0	10.9	10.2	10.3
BOC (in billion pesos)	99.3	117.2	127.3	154.6	198.2	228.2	254.5
Percent Growth	-0.8	18.0	-20.6	6.8	35.7	1.5	11.5
% of GDP	2.5	2.7	2.6	2.9	3.3	3.0	3.1
Other Offices	76.3	95.2	109.1	118.9	128.7	124.7	136.8
Expenditures (in billion pesos)	**789.1**	**839.6**	**893.8**	**962.9**	**1,044.4**	**1,181.8**	**1,236.2**
Percent Growth	10.6	6.4	6.5	7.7	8.5	13.2	4.6
% of GDP	19.9	19.5	18.4	17.8	17.4	15.8	15.0
Overall Surplus/(Deficit)(in billion pesos)	**-210.7**	**-199.9**	**-187.1**	**-146.8**	**-64.8**	**-63.0**	**0**
Overall Surplus/(Deficit), % of GDP	-5.3	-4.6	-3.8	-2.7	-1.1	-0.9	0.0

Sources: DOF, BESF various years
a/ - Adusted
p/ - projected

deficit from 5.3 percent of the GDP in 2002 to around 1.1 percent of the GDP in 2006, the lowest in seven years. This year, the government attempts to further decrease it to P63 billion to pave the way for a balanced budget or zero deficit in 2008.[1]

Figure 2. Real Tax Revenue Growth, Inflation Rate and Tax Effort: 2000-2006 (in %)



Sources of Basic Data: DOF: NSCB: ADB

[1] According to the DBM, while the government expects a balanced budget next year (2008), it will still borrow some P346 billion but P48 billion less than this year's borrowing program of P394 billion, to pay off old debts. The financing requirements in 2008 will rely mostly on long-term domestic bills and bonds and on concessional ODA project and program loans.

2.8 The government expects to raise a total of P1.236 trillion in revenues in 2008-- P1.108 trillion in tax revenues and P127 billion in non-tax income. The projected revenue, which is 17 percent of GDP, represents an increase of 10.5 percent from the 2007 level of P1.118 trillion and is 26.2 percent higher than the P979.64-billion revenues generated in 2006.[2] Tax revenue is estimated to increase by 14 percent from P973.6 billion this year. Both the BIR and BoC will increase their revenue targets by about 10 percent. Proceeds from privatization are expected to contribute 23.25 percent to the total non-tax income, which is 10.28 percent of the total projected 2008 revenue.

2.9 The passage of the RVAT and the excise tax hike in 2005 provided significant contribution to the revenue collection of government. However, the improvement appears to be fleeting as indicated by current trends in collection from these two taxes. Collection from the VAT is expected to decline from an annual growth of 25 percent in 2007 to 16 percent in 2008, though its share to total tax

[2] Based on a DBM press release (August 23, 3007)

collection remains at 18 percent. Thus, it is imperative that the government review the VAT system to improve efficiency in collection. Meanwhile, the projected collection from excise tax in 2008 is 7.9 percent higher than in 2007 but its share to total tax revenue will decline to 5.6 percent in 2008. To maximize the revenue potential from the excise tax on tobacco and alcohol products and to encourage social awareness on the negative effects of these products to people's health, especially the poor, an upward adjustment of the excise tax rates on these products is necessary.

2.10 Moreover, while there was an increase in overall tax revenue in 2006, collection was still short by 2.26 percent of the tax revenue target of P879.8 billion. Tax collection continued to slide in 2007 as the January to September collection was P24.7 billion or 3.0 percent short of target for the period. This brings us to ask: Given the recent trend in tax collection, is the government really certain about achieving its 2008 tax revenue target? Attaining revenue targets is crucial as it is essentially the basis for the expenditure program of the government and the attainment of a balanced budget by 2008. To ensure that the revenue targets will be met, a more aggressive strategy to improve tax administration efficiency and gung-ho efforts to reduce corruption in both the BIR and the BoC should be undertaken. According to a study by Romero, 20 percent of the national budget is lost to corruption. The Commission on Audit estimates that the government loses around P2.0 billion annually to corruption. Similarly, the issue of smuggling needs to be addressed. Estimates show that the government is losing around P60 to P65 billion from technical smuggling alone.

2.11 In addition, given the vulnerable revenue position of the government, it must be careful and thorough in ruling on matters that will have significant impact on government revenues. Recently, the DOF reversed a BIR ruling when it found merit in reclassifying Pall Mall as a mid-priced cigarette instead of a premium-priced cigarette, thus lowering its tax bracket. At the moment, there is still no official figure as to how much foregone revenue the government will incur from the Pall Mall ruling, although there are rough estimates that it is around P93 million a year in excise tax.

2.12 The achievement of revenue targets is also hinged on the attainment of macroeconomic projections. Any variation in the five economic indicators - foreign exchange rate, interest rate, imports, inflation rate and real GDP - will have a considerable impact on the overall fiscal program. For example, a one peso foreign exchange appreciation decreases revenues by P2.7 billion but reduces disbursements by P4.1 billion. The net effect is a P1.4 billion reduction in the deficit (Table 3).

Table 3. Sensitivity Indicators Year 2008 (in billion pesos)

Particulars	Revenues	Disbursement	Surplus/(Deficit)
P 1 Appreciation in foreign exchange	(2.7)	(4.1)	1.4
1% pt. (100 bps) decrease in T-bill Rate (All Mats)	(5.8)	(4.7)	(1.1)
1% pt. Increase in imports	4.0	0.0	4.0
1% pt. Increase in inflation	10.5	0.0	10.5
1% pt. Increase in GDP real	10.8	0.0	10.8

Source: DOF

2008 Expenditure Program

2.14 The role of the National Government in economic development is indisputable. However, national government expenditures as a percentage of GDP continued to decline annually from 19.9 percent in 2002 to 17.4 percent in 2006. While total national government expenditures in 2006 was 8.5 percent higher than in 2005, it is still P58.1 billion less than the programmed spending for the period. Thus, it can be said that apart from the government's improved revenue performance, its tight spending strategy also led to a better fiscal position in 2006.

2.15 Mandated expenditures such as the wage bill, interest payments and LGU transfers account for a large part of total expenditures, with very little left for discretionary spending. In 2004, mandated expenditures started to fall from 14.5 percent of GDP to 13.4 percent in 2006. Prominent among the mandated items which posted a decline was the

Table 4. Budgetary (In)flexibilities Due to Mandated Expenditures: 2001-2006 (as % of GDP)

Particulars	2001	2002	2003	2004	2005	2006	2007	2008
Wages	6.8	6.8	6.5	5.9	5.4	5.4	5.1	5.3
Interest Payments	4.8	4.7	5.2	5.6	5.5	5.1	4.8	4.1
LGU Transfers	3.4	3.5	3.4	3.0	2.9	2.9	3.0	3.1
Total Mandated Expenditure	15.0	15.0	15.2	14.5	13.9	13.4	12.9	12.5
Maintenance and Other Operating Expenses	10.5	10.4	10.6	10.4	10.0	10.2	10.0	9.4
Capital Outlays	2.1	2.1	1.9	1.3	1.2	1.7	1.9	2.0
Revenues	15.5	14.6	14.8	14.5	15.1	16.3	16.9	17.0

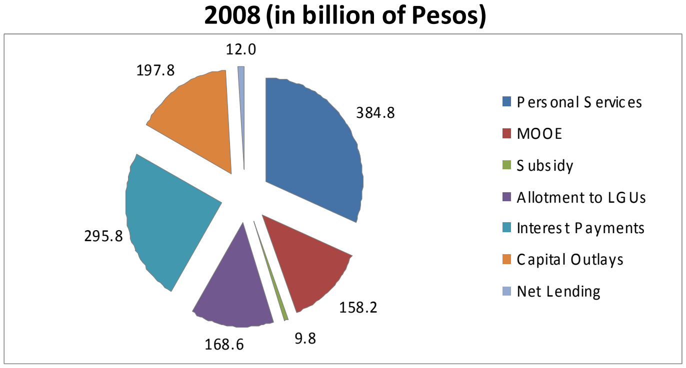
Source of Basic Data: DBM; DOF

wage bill which decreased from 6.5 percent of GDP in 2003 to 5.4 percent of GDP in 2006 due to the non-government hiring policy for vacated positions. LGU transfers also dropped from 3.4 percent of GDP in 2003 to 2.9 percent in 2006. With real tax revenue improving from 2006 to 2007, carrying this forward up to 2008 has made mandated expenditures become less burdensome to the government resulting in more fiscal space.

2.16 In terms of expense class, Current Operating Expenditures (COE) totaling P1.017 billion accounts for 82.9 percent of the total budget for 2008. It consists of Maintenance and Other Operating Expenses (MOOE) and Personal Services which account for 31.4 percent and 12.9 percent, respectively, of the total budget. Capital Outlays increased from 18.1 percent in 2007 to 19.3 percent in 2008.

2.17 Among government agencies, the Department of Education (DepEd) still ranks first in terms of new appropriations with 157.4 billion, followed by Public Works and Highways, P93.8 billion; National Defense, P60 billion; Department of Interior and Local Government including the Philippine National Police, P57.4 billion; Department of Transportation and Communications, P21.7 billion; Department of Health, P16 billion; Department of Agrarian Reform, P13.5 billion; Judiciary, P10.7 billion; and Department of Foreign Affairs, P10.6 billion.[3]

Figure 3. Obligation by Object Major Expenses Class: 2008 (in billion of Pesos)



Source: NEP

Table 5. Top 10 Departments in Budget Allocation: 2007-2008 (In billion pesos)

PARTICULARS	2007		2008		2007-2008
	Levels	Rank	Levels	Rank	% Change
DepED (incl. SBP)	141.4	1	157.4	1	11
DPWH	79.6	2	93.8	2	18
DND (incl. AFPMP)	55.8	3	60	3	8
DILG	53.2	4	57.4	4	8
DA (incl. AFMA-DA)	18.9	5	23	5	22
DOTC	18	6	21.7	6	21
DOH	12.3	8	16	7	30
DAR (incl. AFMA-ARF, ARF)	14.7	7	13.5	8	-8
Judiciary	10.1	9	10.7	9	6
DFA	7.6	-	10.6	10	39
COMELEC	9.5	10	4.5	-	-53

Source: BESF 2008

2.18 In terms of expenditure by sector, social services will get the highest share of the budget from 28.4 percent in 2007 to 30.1 percent in 2008 while economic services will increase from 21.5 percent in 2007 to 23.4 percent in 2008. Meanwhile, the proportion of debt servicing to the national budget is expected to decline from 28.3 percent this year to only 24.1 percent in 2008.

2.19 It must be noted though that while social services has the highest share of the budget in 2008, its share to the GDP of 5.1 percent is still far from what it has been getting a decade ago. In 1998, the ratio of social services spending to the GDP was 6.6 percent, with the education and health sectors receiving 4 percent and 0.5 percent of the GDP, respectively. In 2008, spending for these sectors is only 2.5 percent and 0.3 percent, respectively.

2.20 The increase in the DepEd budget, albeit significant at 11 percent, is still not enough to cover the incremental requirements and the backlog in basic educational facilities and resources. An average of 78 percent of the DepEd 2008 budget is allocated to Personal Services while the remaining 22 percent is divided between MOOE and Capital Outlay. Based on international standards, 15 percent of the agency budget should be spent on

[3] Inclusive of salary adjustment

Table 6. Expenditure Program, by Sector: 2006-2007 (in million pesos)

PARTICULARS	LEVEL			% DISTRIBUTION		
	FY 2006	FY 2007	FY 2008 Proposed	FY 2006	FY 2007	FY 2008 Proposed
ECONOMIC SERVICES	**221,854**	**242,226**	**287,449**	**21.22**	**21.50**	**23.43**
Agriculture & Agrarian Reform	38,711	35,553	41,181	3.70	3.16	3.36
Natural Resources & Environment	8,950	8,828	10,058	0.86	0.78	0.82
Trade and Industry	4,045	3,316	4,247	0.39	0.29	0.35
Tourism	1,716	1,880	1,909	0.16	0.17	0.16
Power and Energy	2,641	2,754	4,341	0.25	0.24	0.35
Water Resources, Development & Flood Control	11,113	10,476	12,437	1.06	0.93	1.01
Communications, Roads and Other Transport	93,875	100,720	112,820	8.98	8.94	9.19
Other Economic Services	2,540	14,321	26,700	0.24	1.27	2.18
Subsidy to LGUs	58,263	64,378	73,756	5.58	5.72	6.01
SOCIAL SERVICES	**282,510**	**320,457**	**368,878**	**27.02**	**28.45**	**30.07**
Education, Culture and Manpower Development	144,226	164,103	181,856	13.80	14.57	14.82
Health	16,074	18,356	22,896	1.54	1.63	1.87
Social Security, Welfare and Employment	50,819	55,377	69,181	4.86	4.92	5.64
Housing and Community Development	6,079	2,513	7,619	0.58	0.22	0.62
Land Distribution	2,663	4,265	4,127	0.25	0.38	0.34
Other Social Services	1,056	7,788	5,228	0.1	0.69	0.43
Subsidy to LGUs	61,593	68,057	77,970	5.89	6.04	6.35
DEFENSE	**51,527**	**53,805**	**61,423**	**4.93**	**4.78**	**5.01**
GENERAL PUBLIC SERVICES	**178,702**	**182,364**	**201,498**	**17.10**	**16.19**	**16.43**
General Administration	62,696	59,139	61,336	6.00	5.25	5.00
Public Order and Safety	63,849	64,905	73,314	6.11	5.76	5.98
Other General Public Services	5,546	6,818	7,844	0.53	0.61	0.64
Subsidy to LGUs	46,611	51,503	59,004	4.46	4.57	4.81
NET LENDING	**131**	**9,101**	**12,000**	**0.01**	**0.81**	**0.98**
DEBT-SERVICE (INTEREST PAYMENTS)	**310,104**	**318,185**	**295,751**	**29.68**	**28.25**	**24.10**
GRAND TOTAL	**1,044,828**	**1,226,139**	**1,227,000**	**100**	**100**	**100**

Source: BESF

MOOE to maintain the quality of basic education. Moreover, comparing expenditure shares of education, the Philippines trails behind some of its neighboring countries with only less than 3 percent of the national income given to education. Thailand and Malaysia are doing better, allotting more than 6 percent of their national income for education. The Philippines' allotment is also far from the United Nations Educational, Scientific and Cultural Organization (UNESCO) prescribed standard of 6 percent of GNP for investments in education. It does not come as a surprise then why there is now an estimated 11.2 million Filipinos who are illiterate.

2.21 Provision for health expenditures, in particular, marks a little increase as it will only grow in terms of pie share from 1.63 percent in 2007 to 1.87 percent in 2008. Although the government has identified health as one of the key areas excluded from the budget ceiling for 2008 using the forward looking estimate—meaning that budgets for health including education and other key priority areas go beyond their budget ceiling— the allocation for this sector is just a small percentage of the total budget allocation of all other sectors, even much lower than public order and safety. Even as the nominal annual allocation for the entire health sector from 2007 to 2008 reflects a 24.7 percent increase, that amount is not adequate to finance the reforms needed in this sector. The poor continue to have relatively lower access even to basic health services such as immunization, medical treatment of diarrhea and maternal/child care than other income groups in any region in the country. Low-income families would usually forego health care, borrow money at usurious rates, sell the few assets they have, or pull children out of school to afford health services they need for catastrophic illnesses. As such, the provision for health insurance or Philhealth, which does not cover 100 percent of hospitalization expenses, to indigent families does not in itself provide a solution to address the health issues of the poor In addition, since hospitals are usually located in major cities in the regions, access by the rural poor is limited as transport cost would eat up a significant portion of their minimal income. The World Health Organization's (WHO's) benchmark for health expenditure in developing countries like the Philippines is at least 5 percent of GDP.

2.22 Overall the health budget, both national and local, does very little in addressing the needs of the poor particularly in the rural areas mainly because the LGUs do not provide adequate resources for health. Hence, devolution of health services to the local government units (LGUs) needs revisiting and re-consideration given the poor health service delivery at the local level.

2.23 Identifying the key priority sectors in the 2008 budget is a big step towards addressing the problems confronting such sectors and the government. But the most important step is the identification of projects that would provide the most benefit to the poor and help reduce poverty. We have briefly summarized above the budgetary issues surrounding health and education. From this point onward, we shall focus the discussion on infrastructure as one of the priority sectors identified in the 2008 budget.

III. Special Focus: Infrastructure

3.1 The provision of public infrastructure is one of the highest priorities of the government today. Its importance as an instrument of economic development and potentially, poverty reduction, is demonstrated by the government's desire to increase the level of investment afforded to it. An increased level of investment in infrastructure is good as it has direct effects on the living standards of the people, and indirectly affects their quality of life through the demand for other inputs and outputs such as health, education, security and convenience. But the increased level of investment in infrastructure can only be made when revenue targets are met and a sustained growth in the economy is achieved.

3.2 This section discusses the role that infrastructure plays in economic growth and in poverty reduction. The analysis is guided by the framework that the imbalance in the levels of infrastructure investment between and among regions in the country is one of the major causes of regional income disparities and as such, the government should address it through an equitable infrastructure program. Having said that, this paper looks at the regional infrastructure needs in the country and compares this with the infrastructure projects the government has embarked on in 2007 and its planned infrastructure projects as reflected in the proposed 2008 budget using GDP and regional poverty incidence as backdrop. Data on infrastructure needs per region or province are culled from existing studies and available government data. The analysis utilizes both primary and secondary data.

Infrastructure and Economic Growth in the Philippines

3.3 A joint study by the World Bank, ADB and the Japan Bank for International Cooperation (2005) substantiates the decisive role that infrastructure has played in growth and poverty reduction in East Asia and the Pacific. According to the study, strong coordination is a prominent feature of the infrastructure stories in the region's now-developed economies—Hong Kong (China), Japan, the Republic of Korea, Singapore, and Taiwan (China)—as well as in the most advanced developing economy - Malaysia.[5] In addition, econometric tests conducted by the World Bank show that there is an estimated 85 percent correlation between GDP growth and infrastructure expenditures in the Philippines.

3.4 Results from a number of studies and competitiveness surveys reflect the deteriorating state of the country's infrastructure. In 2002, the Philippines ranked 47th out of 61 countries and territories in terms of infrastructure. In 2007, its ranking fell to 51st out of 55 countries (Table 7).

3.4.1 Moreover, except for Indonesia, the Philippines pales in comparison with the rest of its neighbors in Asia as shown in a yearly survey from 2004 to 2007 (Table 7). In the 2007 World Competitiveness Survey report, the Philippines remains at the bottom in most of the categories of basic infrastructure, i.e., roads, air transport, energy and water (Table 8).

3.4.2 Recently, the Japan External Trade Office (JETRO) conducted a survey among Japanese international investors on what they consider as deterrent to increasing their investments in Asia. Underdeveloped infrastructure was cited as a major disincentive to Japanese foreign investment in the Philippines.[6] A 2003 World Bank-Asian Development Bank (ADB) investment climate assessment of 716 private firms in the country pointed out that infrastructure, particularly power, is a major element in the cost of doing business.

Table 7. Selected Asian Countries' Infrastructure Rank: 2004-2006

Country	2004	2005	2006	2007
China	41	42	37	28
Indonesia	60	60	61	54
Korea	27	23	24	32
Malaysia	30	34	31	26
Philippines	59	55	56	51
Taiwan	20	18	20	17
Thailand	50	47	48	48

Source: World Competitiveness Yearbook, various years

[4] World Bank. "Philippines: Meeting Infrastructure Challenges". 2005

[5] World Competitiveness Survey, various years.

Statistics indicate that electricity generation costs in the Philippines are among the highest in the region and inter-city freight rates are up to 50 percent higher than in other Southeast Asian countries.[7]

Table 8. Infrastructure Competitiveness Rankings of Selected Asian Countries, 2007

PARTICULARS	China	India	Indonesia	Malaysia	Phils.	Thailand	Singapore
Infrastructure	28	50	54	26	51	48	3
Basic Infrastructure	8	36	50	25	55	35	1
Energy	33	53	52	15	49	35	6
Water	31	47	54	19	52	36	1
Air Transport	2	15	16	20	34	22	23
Roads	3	49	44	51	54	2	5

Source: 2007 World Competitiveness Yearbook, IMD International

Infrastructure Situation in the Philippines

3.5 In general, the quantity and quality of Philippine infrastructure have generally failed to keep pace with the growing demands of the population and urbanization. Rapid urbanization has caused the number of the urban poor to swell and created a tremendous demand for housing and social services, secured land tenure and serviced land, which to a great extent has remained unsatisfied.[8] Access to social services such as water supply and sanitation and solid waste management is on a decline both in terms of coverage and quality.

3.6 In its 2005 Infrastructure Report for the Philippines, the World Bank pointed out that it is the poor who bear the brunt of deficient infrastructure. Less than 10 percent of the poorest income quintile have access to adequate infrastructure services implying that the poor are receiving little or no service, and are therefore likely to be benefitting less than the middle- and upper-income groups from the national government programs and subsidies. The

[6] Llanto, Gilbert. Draft Report "Overcoming Infrastructure Constraints to Economic Growth in the Philippines", Asian Development Bank. 2007

[7] Ibid.

[8] The country has one of the highest urbanization growth rates in the world with an average urbanization growth rate of 5.1% between 1960 and 1995. More than half of the population are urban areas and this proportion is expected to reach 60% by 2010 if current trends continue. While official data indicate that only about 20% of the 7.5 million urban households fall below the poverty income line (Pesos 13,915 per capita per year as of 2001), the poverty income line alone does not capture the dire situation of informal settlers (Llanto, 2007).

WB Report summarized the following problems in access to basic infrastructure services, to wit:

3.6.1 In the road sector, of the 11,000 kilometers of paved national roads for which reliable data on quality exist, less than 50 percent of the total length is considered to be in good condition. The poor road surface translates into higher vehicle operating costs per kilometer. A related study suggests that fatalities related to road accidents are 5.5 times higher than the reported figures, while serious and minor injuries are respectively over 50 and 100 times the reported figures. A glaring example of this deplorable road condition is the Tacloban-Catbalogan-Calbayog national highway in Western Samar which has not seen improvement in more than a decade except for a small portion which was financed via official development assistance. This appalling road condition has obviously increased the transportation cost of the small and medium businessmen such as retailers including the poor farmers and fishers in that province. In Mindanao, limited transport services are commonly observed like in many parts of Bukidnon and other farmlands.

3.6.2 In the water sector, independent surveys find that only less than half the population and about 20 percent of the rural population have access to piped water supply and household connections. In addition, official access data mask the underlying poor quality of coverage, indicated by interrupted supply, significant water pressure fluctuations, and reported difficulties in abiding by drinking-water quality standards. The problems of access to safe drinking water as well as interrupted water supply are prevalent in almost every province in the country. Even Metro Manila and the other cities in the country are not spared from such as basic an infrastructure problem.

3.6.3 For sewerage, it is estimated that only about 4.0 percent of the population nationwide had access as of year 2000 and about 3.0 percent of the population (mostly rural) have acceptable on-site treatment and disposal facilities. In addition, access to sewerage networks outside Metro Manila is practically non-existent with the sewerage systems in Baguio, Vigan and Zamboanga cities serving less than 3.0 percent of their respective service area population.

3.6.4 Despite improvements in the power sector over the past few years, the reliability of the existing transmission system is well below international standards. Both frequency and duration of interruptions are significantly higher than its counterparts, such as in Thailand. In 2003, unserved energy increased by 50 percent (year on year) in the Visayas, underlining the increasing difficulties of providing reliable supply in that region. In support of this World Bank empirical observation, anecdotal evidence show that the frequency and duration of power interruptions in the Visayas particularly in almost all parts of Samar have not abated as of this date.

3.7 Furthermore, the World Bank found empirical evidence indicating that wide income disparities among regions in the Philippines can be attributed, in part, to regional differences in the level of infrastructure development. For instance, the southern and the eastern parts of the country, which have the lowest gross regional domestic product (GRDP), are also the regions that have dismal performance in terms of access to basic infrastructure. The linkage between income and access is remarkably clear in the Autonomous Region for Muslim Mindanao (ARMM), CARAGA, Zamboanga and Region VIII. ARMM, having the lowest GRDP, consistently ranked lowest in access to safe water, electricity, and sanitation as well as in having the lowest road density in the country. CARAGA and Region VIII, on the other hand, scored low in road density, access to electricity, and access to sanitary toilets. In contrast, regions with higher GRDP such as the National Capital Region and its surrounding areas, regions III and IV-A, rank significantly higher in access to basic infrastructure (Table 9). The bottom line is that in areas lacking in vital infrastructure networks, the challenge of stimulating economic activity is more overwhelming.

3.8 The aforementioned infrastructure situation in the Philippines clearly paints a picture in which the poor bears the effects of infrastructure deficiency. As such, any significant improvement in the GDP

Table 9. Uneven Regional Development and Uneven Infrastructure Access

Region	Poverty Incidence 2003	Regional GDP (% distribution) 2006[a]	Access to Water (%) 2004[a]	Access to Sanitary Toilet Facilities (%) 2003[b]	Access to Electricity (Energized Brgys as a % of Potential No. of Brgys) 2007	Road Density (km per sq.km) 2007	Road Visual Condition (km.) 2007	
							Good	Bad
CAR	25.8	2.2	41.3	79.2	97.0	0.5	1,151	601
NCR	4.4	32.5	--	93.8	--	7.5	*no data*	*no data*
1 Ilocos	24.4	3.0	39.9	93.5	99.9	1.1	820	786
2 Cagayan	19.3	2.0	37.6	92.2	95.2	0.5	850	838
3 Central Luzon	13.4	8.4	40.0	89.4	99.8	0.8	672	1,301
4-A CALABARZON	14.5	12.3	37.6	89.4	99.8	0.7	1,479	826
4-B MIMAROPA	39.9	2.7	45.7	70.1	92.5	0.3	1,141	980
5 Bicol	40.6	2.8	30.4	73.9	94.0	0.5	1,098	982
6 W. Visayas	31.4	7.2	36.5	73.9	98.9	0.9	1,458	1,179
7 C. Visayas	23.6	7.1	35.0	70.9	--	1.0	1,054	628
8 E. Visayas	35.3	2.2	38.1	66.5	93.7	0.4	868	1,292
9 Zamboanga	44.0	2.6	34.6	71.7	88.1	0.6	585	537
10 N. Mindanao	37.7	4.9	35.2	86.7	95.4	0.9	937	676
11 Davao	28.5	4.5	38.0	79.6	99.4	0.6	855	470
12 Socsksargen	32.1	3.5	37.9	80.5	94.2	0.6	759	545
CARAGA	47.1	1.3	36.6	84.5	97.8	0.4	688	564
ARMM	45.4	0.9	24.0	42.5	78.0	0.3	*no data*	*no data*
PHILIPPINES	***24.4***	***100.0***	***34.7***	***81.9***	***77.0***	***0.6***	***14,415***	***12,205***

Sources: NSCB for data on Poverty Incidence; World Bank; National Anti-Poverty Commission for data on access to water; GIS-Socio-economic Profile of the Philippines; Philippine Institute for Development Studies for data on access to access to sanitary toilet facilities; and Road and Bridge Information Application (RBIA)-DPWH for data on road visual condition

Notes: a Latest Data
b Access to sanitary toilet facilities is the proportion of families with access to sanitary toilet facility which includes water-sealed types of toilet facilities.

will not be felt by the poor unless it is translated into specific infrastructure projects that would increase their access to basic infrastructure services and the corresponding derived demand for other basic social services such as education. The World Bank study showed that the provision of roads complemented with human capital such as schooling, has a favorable effect on the well-being of the poor.

The disparate regional access to infrastructure services and facilities exacerbate the already uneven regional development. This inequality must be addressed not only to reduce social and political tension, but also to make growth more inclusive, to ensure that the poor benefit from the economic growth the country is experiencing. The government can intervene by increasing infrastructure investment in regions wherein people have less access to basic infrastructure facilities.

Infrastructure Spending in the Philippines

3.9 The Medium Term Philippine Development Plan (MTPDP) 2004-2010 squarely addresses the problem of the lack of infrastructure. It identifies the priority transport infrastructure projects with particular emphasis on completing the Nautical Highway, developing roads and rail systems that will decongest Metro Manila and support the development of new centers of government, facilitate access to tourist areas, and support the affirmative action for peace and development in Mindanao and other highly impoverished areas. It is claimed that the Nautical Highway with RORO vessels and ports has shown remarkable success in stimulating trade and tourism activities in coastal communities by significantly reducing the costs of transport and cargo handling. This effect has yet to be seen in how prices of goods at the retail level have changed given other factors constant. The Plan also identifies measures to make cheaper and

Table 10. National Government Infrastructure Program: 2004-2008 (in billion pesos)

Particulars	2004	2005	2006	2007	2008
Roads and Bridges	17.927	17.939	38.883	40.659	61.871
Flood Control/Seawalls	11.150	9.511	8.197	8.562	6.542
Preliminary detailed engineering		0.187	0.184	0.329	0.934
National Buildings	0.030	0.026	0.055	0.427	0.750
Water Supply	0.020	0.075	0.918	0.500	0.500
Other Public Works	9.562	10.138	21.490	12.829	6.300
Airports/Navigational Facilities	0.751	1.213	3.126	8.375	7.774
Telecommunications			0.120	0.067	0.010
Land Transportation	0.287	0.146	0.121	0.204	0.184
Ports and Lighthouses	0.278	0.073	0.286	0.395	0.065
School Building Programs	3.408	2.310	3.431	5.890	6.352
Irrigation	3.965	4.184	5.779	7.727	8.252
Farm-to-market Roads	1.326	1.490	2.935	1.899	7.974
Post-harvest Facilities	0.258	0.532	0.153	1.157	0.336
Bridge/Spillway		0.036	0.109	0.070	
Building and Structure		0.104	0.106	0.050	
Livestock and Coops Outlay, Farm Protection/Rehabilitation			0.055		
Water System	0.049	0.094	0.059	0.036	
Others	2.429	1.903	5.832	5.470	8.115
Total NG Infra Program	**51.440**	**49.961**	**91.839**	**94.646**	**115.959**
Growth	*-15.27*	*-2.88*	*83.82*	*3.06*	*22.52*
GDP	**4,871.555**	**5,437.905**	**6,032.624**	**6,418.712**	**6,835.928**
NG Infra Program as % of GDP	**1.06**	**0.92**	**1.52**	**1.47**	**1.70**
Growth	*-24.92*	*-12.99*	*65.70*	*-3.14*	*15.04*

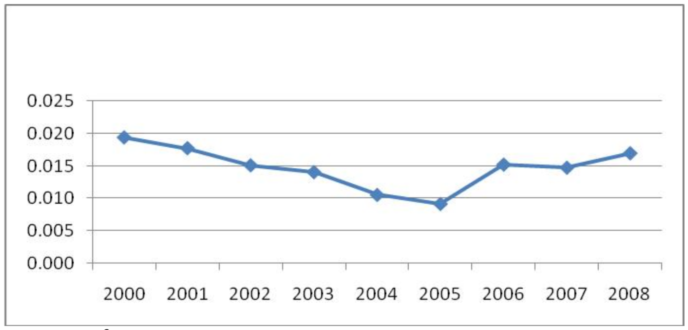
Sources: DBM and NSCB

Note: GDP 2007 growth forecasted at 6.4%; 2008 GDP growth forecasted at 6.5%

more accessible the digital infrastructure across the country through lower connectivity costs, regulatory reforms, and development of the human resource skills to support the development of the ICT-related industries.

3.10 Because of financial difficulties the country has experienced in the past, inadequate investment was observed in key areas related to trade and transit infrastructure (roads and bridges), transmission lines, energy, agricultural infrastructure such as dams and river diversions, water supplies, among others. With inflation averaging 5.3 percent from 2000 to 2006, national government (NG) infrastructure spending as a percentage of GDP averaged only 1.45 percent during the same period. In real terms, NG infrastructure spending as a percentage to real GDP has been very minimal, declining even from 0.019 percent in 2000 to 0.009 percent in 2005 despite a marked improvement in real GDP. It slightly improved to 0.015 percent in 2006 and 2007 then to 0.017 in 2008 (Figure 4). During the period 2000 to 2005, infrastructure spending as a percentage of total real NG budget has been decreasing at an average rate of 11.0 percent. The government's strong commitment to improve infrastructure in the country is demonstrated by the increase in real infrastructure spending as a percentage of real NG budget, which rose to 8.8 percent in 2006, 8.4 percent in 2007, and 9.5 percent in 2008. Weak public finances, which have been elaborately explained in the preceding chapter, however, pose a great constraint on the planned infrastructure spending.

Figure 4. Real NG Infrastructure Spending as % of Real GDP: 2000-2008



Sources of Basic Data: ADB; NSCB; BESF, DBM

3.11 Public sector infrastructure spending-to-GDP ratio —2.3 percent for 2006 and 2.4 percent for 2007[9]— is still lower than the 5 percent-benchmark ratio recommended by the World Bank for infrastructure investments to have a substantial impact on the economies of middle-income countries in East Asia. The public sector infrastructure budget is composed of capital outlays expenditure of the government through the various line agencies plus government-owned and-controlled corporations (GOCCs) and local government units (LGUs) that carry out the infrastructure development plan.

3.12 To stimulate growth in strategic areas the President launched the "Super Regions"[10] project which is a demonstration of the government's bid to alleviate poverty by channeling funds to impoverished regions in the country. Under this project, the country's 16 regions have been grouped into four "super" regions for investment planning purposes. These are the North Luzon Agri-Business Quadrangle (NLAQ); Central Philippines composed of Palawan and Romblon, the Visayas and Bicol; Mindanao, which includes Camiguin, Siargao, and Dapitan ; and the Luzon Urban Beltway (LUB) which

[9] Congressional and Planning Budget Office. "An Analysis of the President's Budget for FY 2007." November 2006

[10] The "super regions" plan seeks to harness the natural comparative advantage of each super region to promote scale economies, enhance their functional linkages and integration, and boost their economic and market potentials.

spans most of Central Luzon, Metro Manila, Calabarzon, Mindoro and Marinduque.

3.13 The super region project will get the lion's share of about 56.3 percent of the total planned infrastructure spending from 2007 to 2010. However, the project's plan shows that funding allocation is biased towards the Luzon Urban Beltway (LUB), where Metro Manila is located. Mindanao, which hosts the two poorest regions in the country – CARAGA and ARMM with poverty incidence of 47.1 percent and 45.4 percent, respectively – ironically gets a measly share of 9.0 percent of the total infrastructure funding requirements for the entire project period.

From 2007 to 2010, about P207.8 billion will be allocated to finance infrastructure projects in the Luzon Urban Beltway –this is even larger than the combined infrastructure allocation for North Luzon Agribusiness Quadrangle (P23.1 billion), Central Visayas (P98.9 billion), and Mindanao (P33.3 billion). According to the Department of Budget and Management (DBM), the funding requirement for the SONA-identified projects to be implemented in the medium term is pegged at P369.0 billion. Almost half of the funding requirement or P184.5 billion will come from the National Government and official development assistance (ODA) fund. Government-owned and -controlled corporations (GOCCs), as well as the private sector, through build-operate-transfer (BOT) projects, will also be tapped to contribute P115.6 billion, and P67.7 billion, respectively, to help finance these much-needed infrastructure projects.

Comparative Infrastructure Allocation for 2007 and 2008 and Regional Distribution

3.14 Subsequent to the aggressive infrastructure program introduced in the MTPDP 2004-2010 and the 2006 SONA, NG infrastructure spending as a percentage of GDP will increase considerably from 1.06 percent in 2004 to 1.70 percent in 2008 (Table 10). Growth in infrastructure spending has been erratic. For instance, it slowed down to 3.06 percent in 2007 from a high of 83.82 percent growth in 2006 and in 2008 it is expected to grow by 22.52 percent.

3.15 The amount allocated to the construction and/or rehabilitation of roads and bridges consistently represent the largest percentage share of the total infrastructure budget. The item accounted for 42.95 percent of total infrastructure budget in 2007 and 53.36 percent in 2008. Considering this uptrend, one can guess at the quality of roads being constructed or rehabilitated by looking at road conditions per region—the percentage of roads in good and bad condition are almost equal despite the yearly allocation for road construction and rehabilitation. This leads us to question not just the quality of roads constructed or rehabilitated annually, but the efficiency and effectivity of public spending on roads as well.

3.16 In the period 2006-2007, the shares of several infrastructure items significantly increased particularly the shares of: (1) post-harvest facilities which increased by 633.78 percent; (2) airport/navigational facilities which increased by 159.97 percent; and (3) school building program which increased by 66.58 percent. For 2007-2008, the share of farm-to-market roads increased by a considerable 242.73 percent.

Post-harvest Facilities

3.17 An important infrastructure item that needs government attention is post-harvest facilities. For instance, the Philippines enjoys a competitive edge over Thailand in rice yield at 35.1 metric ton/hectare as against 27.5 metric ton/hectare (FAOSTAT, 2004). However, this gain loses steam because post-harvest losses in rice production reach as high as 34 percent, while Thailand is relatively more effective with only 15 percent loss. According to the Department of Agriculture (DA), losses incurred by the agricultural sector from grains due to lack of post-harvest facilities are about 5 percent or P8.1 billion a year. If post-harvest facilities were improved, importation on rice alone would be reduced by about 30 percent. The fisheries sector, on the other hand, incurs about 20 percent in losses due to inadequate post-harvest facilities.

In 2007, post-harvest facilities for agriculture received only 14.0 percent (P2.0 billion) of the P14.4 billion Agriculture and Fisheries Modernization Program (AFMP) budget while irrigation services received the highest allocation of 52.0 percent (P7.5 billion). For 2008, even as the budget for post-harvest facilities will get a substantial increase of 123.3 percent compared to the 18.7 percent increase in the irrigation budget, irrigation will still get the highest allocation equivalent to 44.3 percent (P8.9 billion) of the total AFMP budget while post-harvest facilities will only get 22.4 percent (P4.5 billion). Is the increase in the post-harvest facilities budget for 2008 enough to maximize output and income in the agriculture and fisheries sector?

Schools and Classrooms

3.18 The Department of Education (DepEd) estimates a total of P13.91 billion of national unfunded shortage in school buildings for 2007. The shortage does not yet include school buildings which are rendered structurally unsound. The DepEd targets a total of 6,000 classrooms yearly to be constructed out of its school building fund and the priority development fund of the legislators. In 2007, P1.76 billion is allocated for the construction of 3,200 classrooms, out of which P1.0 billion is allocated and lodged under the DepEd-Office of the Secretary as locally-funded projects. The rest of the budget will be under the Special Purpose Fund and the distribution shall be in accordance with R.A. 7880. The P1.760 billion fund which is only 0.16 percent of the total NG budget will be augmented by foreign-assisted school building projects of about P23.5 million. For 2008, the DepEd's School Building Program is allotted P2 billion for the construction of 3,636 classrooms—this is 1.72 percent of the total NG Infrastructure program of P115.959 billion.

At this point, it is important to raise again the issue that in a school building project undertaken by the Filipino Chinese Chamber of Commerce Inc. (FCCCI) for a Senator, a 49m^2 (7m x 7m) classroom amounted to only P225 thousand whereas it costs the DPWH about P450 thousand to construct a standard size of 63m^2 (7m x 9m) classroom. This translates to a unit price per square meter of P7,142 and P4,591 for the government price and FCCCI price, respectively. For 2008, the DPWH projects the cost of construction per classroom at P500, 000 each, although according to the DBM, this is the ceiling price, and that there are instances when the DPWH can actually go lower, depending on the availability of materials, labor and other indirect costs such as taxes, etc. We ask then: If the FCCCI can construct a school building at a much lower cost, then why cannot the DPWH? Why not lower the ceiling cost for constructing a school building? Clearly, the budget allocated for the school building program is insufficient in closing the gap on school buildings in the country. This inadequacy is worsened by the very high cost of construction by the DPWH.

Airports and Navigation Facilities

3.19 Airports and navigational facilities will get 52 percent of the DOTC 2008 budget. While it is admitted that ports and airports are important in the promotion of trade and tourism in the less-developed regions, the provision of budget for their creation must be carefully evaluated to adhere to the principle of allocative efficiency. In previous budget hearings, legislators have questioned the cost effectiveness of allocating budget for some ports and airports in areas with low tourism and business potential.

Railways and Road System

3.20 Railway services will get 45 percent of the DOTC's 2008 budget but there are lingering issues that need resolution as they have tremendous impact on the fiscal position of the government, to wit:

i) The government is still subsidizing the operations of the MRT 3 because it agreed to guarantee the $190 million investment of the consortium for the construction of the system under the Build-Lease-Transfer Scheme. In 2006, government subsidy to MRT 3 amounted to P2 billion. For 2008, the proposed subsidy is P2.4 billion or equivalently P16.3 per passenger—this is higher compared to the P12.5 average fare per passenger assuming an end-to-end rail route per passenger. Subsidy is taken from the taxes paid by all Filipino taxpayers including those taxpayers who live in the Visayas and Mindanao who do not use the MRT. As such, it becomes necessary to implement the user-pay principle to put a stop to an unfair government subsidy policy such as this. The rate may be adjusted gradually to ease resistance from the riders but the latter must be informed of the logic behind such government action even as it may be politically painful;

ii) The government borrowed $421 million for the North Railway Project with additional $82 million to take care of incidental expenses under the sunk cost and tax provision. This is a 32-kilometer stretch from Caloocan to Malolos with 21 four-car DMUs and will have an average daily ridership of 41,486 passengers. Studies show that the North Rail project is not financially viable if compared with the South Luzon Railway project, a 34-kilometer stretch which has 21 diesel multiple units (DMUs) and an estimated average daily ridership of 187,000 passengers. In addition, the ridership of the North Railway will only be 14 percent of the ridership of the MRT 3 and the government subsidizes the MRT 3; and

iii) The joint venture agreement entered into by the Light Railway Transit Authority (LRTA) with SNC Lavalin International Incorporated (Lavalin) for the LRT Line 1 South Extension (11.5-km stretch from Baclaran to Bacoor) is a BOT unsolicited proposal. Part of the agreement stipulates that if the project will not push through, Lavalin will be paid US$20 million for their company assets, feasibility studies and etc. The project was going smoothly until Lavalin gave LRTA a notice of intent to terminate in 2002 because the present administration withdrew the performance undertaking or government guarantee for the civil works. Since Lavalin had already shelled out money, they wanted to be compensated for the non-pursuance of the project as part of the provision under the joint venture agreement. At present, the board of directors of the LRTA agreed to terminate the project with the payment of the development cost incurred by Lavalin subject to the determination of an independent certification engineer that the development cost is reasonable.

Water Supply and Water System

3.21 In 2008, there is a glaring lack of commitment for investment in the development of water supply/systems. In fact, this item's share in the total infrastructure budget for 2008 is a mere 0.43 percent. If the government is earnest about improving the welfare of the poor people in the poorer regions, then it would be wise to increase investments in the improvement and development of water supply/systems, thereby increasing the poor's access to safe drinking water and sanitary toilet facilities.

Table 11. Infrastructure Outlays: 2006-2008 (in billion pesos)

Particulars	2006	2007	2008	Growth Rate		Percent of Total Infra		
				06-07	07-08	2006	2007	2008
TOTAL	91.838	92.647	113.029	0.9	22.0	100.0	100.0	100.0
DPWH	69.198	62.662	75.307	-9.4	20.2	75.3	67.6	64.9
DOTC	7.668	11.787	14.970	53.7	27.0	8.3	12.7	12.9
DepEd	3.431	3.890	6.352	13.4	63.3	3.7	4.2	5.5
ARMM	0.897	1.397	1.000	55.7	-28.4	1.0	1.5	0.9
DA	7.131	9.697	12.592	36.0	29.9	7.8	10.5	10.9
DAR	2.851	1.918	1.040	-32.7	-45.8	3.1	2.1	0.9
Allocation to LGUs	0.662	1.296	1.768	95.9	36.5	0.7	1.4	1.5

Source: BESF, DBM

3.22 The DPWH is allocated a large percentage of the total NG infrastructure outlay annually. DPWH's share accounts for 67.6 percent in 2007 and 64.9 percent in 2008. For the same period, however, an increasing fraction is allocated to the DOTC with 12.7 percent in 2007 and 12.9 percent in 2008; DepEd garnering 4.27 percent in 2007 and 5.5 percent in 2008; and the Department of Agriculture (DA) garnering 10.5 percent in 2007 and 10.9 percent in 2008 (Table 11).

3.23 Since the DPWH is set to receive the lion's share of the total infrastructure program accounting for 64.9 percent, it is worth taking a closer look at the regional distribution of its budget. Luzon's allocation will account for more than a third (37.4 percent) of the department's total budget, while infrastructure projects of Visayas and Mindanao will account for 15.1 percent and 18.9 percent, respectively (Table 12).

3.24 Five regions will receive an allocation of more than 5 percent each of the total DPWH budget, i.e., Region 3 (7.3 percent), Region 6 (6.7 percent), Region 4-A (6.5 percent), Region 1 (5.8 percent), and the NCR (5.1 percent). The budget allocation of these 5 regions totals P23.6 billion, representing 31.4 percent of the total DPWH budget for 2008. Except for Region 1, these regions have the highest

Table 12. Summary of Obligations for DPWH Projects, By Region, (in million pesos)

Region	2003 Poverty Incidence	2007 Adjusted Total	2008 Proposed Total	% Share FY 2008
CAR	25.8	2,393.6	2,697.3	3.6
NCR	4.8	6,361.3	3,841.2	5.1
1 Ilocos	24.4	3,893.2	4,361.4	5.8
2 Cagayan	19.3	1,161.5	1,348.1	1.8
3 Central Luzon	13.4	3,612.6	5,520.6	7.3
4-A CALABARZON	14.5	2,111.2	4,881.8	6.5
4-B MIMAROPA	39.9	1,567.3	3,470.0	4.6
5 Bicol	40.6	2,932.4	2,019.3	2.7
Total Luzon	-	*24,033.2*	*28,139.8*	*37.4*
6 W. Visayas	31.4	4,100.6	5,017.9	6.7
7 C. Visayas	23.6	2,028.2	2,932.4	3.9
8 E. Visayas	35.3	3,668.4	3,437.6	4.6
Total Visayas	-	*9,797.2*	*11,387.9*	*15.1*
9 Zamboanga	44.0	829.5	1,674.0	2.2
10 N. Mindanao	37.7	1,312.6	3,289.5	4.4
11 Davao	28.5	1,617.3	2,965.8	3.9
12 SOCCSKSARGEN	32.1	1,070.3	1,365.4	1.8
ARMM	45.4	653.1	1,685.3	2.2
CARAGA	47.1	2,073.9	3,227.0	4.3
Total Mindanao	-	*7,556.8*	*14,207.0*	*18.9*
Central Office			10,135.2	13.5
Nationwide		21,274.7	11,437.0	15.2
Grand total	-	***62,661.8***	***75,307.0***	***100.00***

Source: Budgetary Highlights FY 2008. Agency (DPWH) Submission.

gross income and have relatively low poverty incidence among all regions in the country and yet they are given higher budgets than the impoverished regions such as ARMM, CARAGA and Eastern Visayas (cross-reference Table 9).

3.25 While the total planned infrastructure spending for 2007-2010 appears to be skewed towards Luzon, the bulk of the 2008 budget for the Super Regions project is alloted to Central Philippines. For instance, in 2007 Central Philippines was allotted the largest share equivalent to almost half of the "Super Regions" budget (48.4 percent). But for 2008, its share significantly decreased (29.8 percent) while the Mindanao region garnered the largest share (31.4 percent). And although the allocation for "Super Regions" projects increased from P19.2 billion in 2007 to P22.1 billion in 2008, its share in the total infrastructure program decreased from 20.3 percent to 19.1 percent for the same period (Table 13).

Table 13. Infrastructure Outlays: 2007-2008

Particulars	Outlays (in million pesos)		Percent of Total Infra Program		Percent of Total SONA Projects	
	2007	2008	2007	2008	2007	2008
Total NG Infra Program	**94,646**	**115,959**	**100.0**	**100.0**		
o/w, SONA Projects	19,231	22,094	20.3	19.1	100.0	100.0
NLAQ	2,363	3,567	2.5	3.1	12.3	16.1
LUB	3,858	5,002	4.1	4.3	20.1	22.6
Central Phil	9,300	6,581	9.8	5.7	48.4	29.8
Mindanao	3,710	6,944	3.9	6.0	19.3	31.4

Source: 2008 Budget of Expenditures and Sources of Financing during MYEB Presentation, DBM

Road Network

3.26 A national road network is the backbone of a country's transport sector. An extensive paved national road network across rural areas offer larger direct gains to the poor since there is the potential for rural feeder roads that could link the poor as consumers, suppliers and workers with markets. In the Philippines, the ratio of paved national roads to total national road network of about 29,374 kilometers is 70 percent—only 19 percent of this is in good visual condition; 30 percent is in fairly good condition; 21 percent is in poor condition; and the other 21 percent is in bad condition. A World Bank report on infrastructure in the Philippines revealed that the annual vehicle operating cost of bad road network is about P13 billion per year. A one percent improvement in national roads as measured by the International Roughness Index (IRI)[11] translates into a 4 percent reduction in vehicle operating cost. A study by Sigua (2004) showed that road accidents due to bad road condition cost the economy some P49 billion in 2002 or about 1 percent of GDP. Hence, it is a sound economic policy to improve the national road network. According to the DPWH, it takes them between P15-22 million to construct a one- kilometer road, and P11- 18 million to improve road service. From the foregoing estimates, the 2008 budget is far from being sufficient to fully rehabilitate the road network in the country.

3.27 It becomes inevitable that there are regional disparities in terms of access to road infrastructure in the country. Luzon's road network accounts for 49.8 percent of the total national road network in 2004 and 51.3 percent in 2007ð this is more than

[11] International Roughness Index (IRI) is a mathematically defined summary statistic of the longitudinal profile in the wheelpaths of a travelled road surface. It also describes a scale of roughness (zero for a true planar surface, 2 for paved roads in good condition, 6 for moderately rough paved roads, 12 for extremely rough paved roads, and up to 20 for extremely rough unpaved roads). (Source: Infrastructure Notes. World Bank. Oct 1999)

Table 14. National Road Networks, Conditions and DPWH Outlays, per region: 2007-2008

National Road Networks, 2007 *			Road Density	Road Visual Condition (km), 2007 **		DPWH Outlay 2007		DPWH Outlay 2008	
Regions	**in km.**	**% share**	**(km/sq km)**	**Good**	**Bad**	**Million pesos**	***% Share***	**Million pesos**	***% Share***
CAR	1,845	6.3	0.5	1,151	601	2,393.6	*5.8*	2,697.3	*5*
NCR	1,032	3.5	7.5	…..	…..	6,361.3	*15.4*	3,841.2	*7.1*
1 Ilocos	1,610	5.5	1.1	820	786	3,893.2	*9.4*	4,361.4	*8.1*
2 Cagayan	1,765	6.0	0.5	850	838	1,161.5	*2.8*	1,348.1	*2.5*
3 Central Luzon	2,032	6.9	0.8	672	1,301	3,612.6	*8.7*	5,520.6	*10.3*
4-A CALABARZON	2,407	8.2	0.7	1,479	826	2,111.2	*5.1*	4,881.8	*9.1*
4-B MIMAROPA	2,185	7.4	0.3	1,141	980	1,567.3	*3.8*	3,470.0	*6.5*
5 Bicol	2,198	7.5	0.5	1,098	982	2,932.4	*7.1*	2,019.3	*3.8*
Luzon	***15,074***	***51.3***	-	***7,211***	***6,314***	***24,033.2***	***58.1***	***28,139.8***	***52.4***
6 W. Visayas	2,881	9.8	0.9	1,458	1,179	4,100.6	*9.9*	5,017.9	*9.3*
7 C. Visayas	2,036	6.9	1	1,054	628	2,028.2	*4.9*	2,932.4	*5.5*
8 E. Visayas	2,373	8.1	0.4	868	1,292	3,668.4	*8.9*	3,437.6	*6.4*
Visayas	***7,290***	***24.8***	-	***3,380***	***3,099***	***9,797.2***	***23.7***	***11,387.9***	***21.2***
9 Zamboanga	1,218	4.1	0.6	585	537	829.5	*2*	1,674.0	*3.1*
10 N. Mindanao	1,682	5.7	0.9	937	676	1,312.6	*3.2*	3,289.5	*6.1*
11 Davao	1,448	4.9	0.6	855	470	1,617.3	*3.9*	2,965.8	*5.5*
12 Socsargen	1,304	4.4	0.6	759	545	1,070.3	*2.6*	1,365.4	*2.5*
CARAGA	1,358	4.6	0.4	688	564	2,073.9	*5*	3,227.0	*6*
ARMM	…..	…..	0.3	…..	…..	653.1	*1.6*	1,685.3	*3.1*
Mindanao	***7,010***	***23.9***	-	***3,824***	***2,792***	***7,556.8***	***18.3***	***14,207.0***	***26.4***
PHILIPPINES	29,374	100.0	***0.6***	***14,415***	***12,205***	***41,387.0***	***100***	***53,734.7***	***100***

Source: DPWH

* As of Sept 7, 2007

** **Good Road Condition** refers to sum (in km) of roads with Good and Fair Visual conditions. **Bad Road Condition** refers to sum (in km) of roads with Poor and Bad Visual Condition.

the combined Visayas and Mindanao road networks. Region 4 accounts for the highest absolute share of around 15 percent of the total. In the same period, the road network of the CAR and Region 9 considerably rose by 16.2 and 14.0 percent, respectively.

3.28 Road density in Luzon averaged 1.5 per square kilometer while Visayas and Mindanao averaged 0.8 and 0.6 per square kilometer, respectively. As expected, the NCR recorded the highest road density per square kilometer in the country. On the other hand, two out of the four regions (Regions 4-B, 8, 13, and the ARMM) which recorded the lowest road density per square kilometer are located in Mindanao.

3.29 Regions 3 and 8 have the most number of kilometers of roads in poor and bad condition in the country (Table 14). Accordingly, region 3 will get the highest allocation of the DPWH budget for 2008 followed by CALABARZON and Region 6, which rank 3rd and 7th in the most number of poor and bad national roads, respectively. However, Region 8 will get a budget even lower than that of the NCR's which is assumed to have better road conditions. Meanwhile, Zamboanga, Socsargen , Bicol, and Cagayan will get the least budget allocation for 2008 even as they also have the least number of road network. However, this is not the case for Bicol which ranks 4th in the most number of bad roads. These situations imply a critical need for the development of more national road network in these regions.

3.30 For 2008, Region 3's road network is expected to greatly improve with the construction of the Php20.9 billion Subic-Clark-Tarlac Expressway and

Table 15. Irrigation Targets

Region	2006 (actual)			2007 (target)			2008 (target)		
	Est. Total Irrigable Area (ha)	Total Irrigated Area (ha)	Irrigation Devt (%)	Irrigation Coverage Target (ha)	Total Irrigated Area (ha)	Irrigation Devt (%)	Irrigation Coverage Target (ha)	Total Irrigated Area (ha)	Irrigation Devt (%)
CAR	99,650	80,165	80.4	-	80,165	80.4	-	80,165	80.4
1 Ilocos	277,180	179,384	64.7	-	179,384	64.7	1,600	180,984	65.3
2 Cagayan	472,640	198,901	42.1	3,106	202,007	42.7	4,179	206,186	43.6
3 C. Luzon	498,860	269,136	54.0	6,000	275,136	55.2	3,581	278,717	55.9
4 S. Tagalog	246,960	123,235	49.9	-	123,235	49.9	-	123,235	49.9
5 Bicol	239,660	118,975	49.6	-	118,975	49.6	-	118,975	49.6
6 W. Visayas	197,250	77,806	39.4	193	77,999	39.5	851	78,850	40.0
7 C. Visayas	50,740	28,928	57.0	4,726	33,654	66.3	1,675	35,329	69.6
8 E. Visayas	84,380	53,016	62.8	516	53,532	63.4	200	53,732	63.7
9 Zamboanga	76,080	36,843	48.4	-	36,843	48.4	-	36,843	48.4
10 N. Mindanao	120,700	52,463	43.5	120	52,583	43.6	1,355	53,938	44.7
11 Davao	149,610	54,327	36.3	-	54,327	36.3	255	54,582	36.5
12 Socsargen	293,610	84,062	28.6	-	84,062	28.6	1,728	85,790	29.2
ARMM	156,720	23,269	14.8	360	23,629	15.1	3,183	26,812	17.1
CARAGA	162,300	47,414	29.2	-	47,414	29.2	250	47,664	29.4
TOTAL	**3,126,340**	**1,427,924**	**45.7**	**15,021**	**1,442,945**	**46.2**	**18,857**	**1,461,802**	**46.8**

Source: National Irrigation Administration

the initiation of the Php61.9 billion Northrail Project that is set to traverse the province of Bulacan. On the other hand, the construction of ports in Region 8 will not only develop the country's Nautical Highway, but will also expand the region's road networks. This is imperative if the region is set to become one of the country's major tourist destinations.

3.31 It is encouraging to note that Mindanao is set to receive a considerable increase in their share of the proposed 2008 DPWH infrastructure outlay by 44.8 percent. Furthermore, the government is set to invest Php12.9 billion in the development of Mindanao's road networks. This amount represents 62.6 percent of the region's total infrastructure budget for 2008. Meanwhile, the shares of Luzon and Visayas are set to decrease by 9.8 and 10.5 percent, respectively.

Irrigation

3.32 Sawada and Shinkai (2002) found that rural irrigation facilities in Sri Lanka can be an effective tool for reducing the number of both the chronically and transitory poor since it not only raises permanent income, but also reduces expenditure fluctuations in the dry season, which can cause households to slip into poverty.

3.33 In the Philippines, the poorest people remain concentrated in rural areas and are dependent on agriculture for their livelihoods. As such, irrigation is an integral component in rural development and poverty alleviation. For the next two years, a 25.54 percent increase in target irrigation areas has been set. Region 7 and the ARMM will see a considerable increase in irrigated hectarage, growing by as much as 22.1 percent and 15.1 percent, respectively. Regions 4, 5, 9 and the CAR however, will see no change in the size of areas provided with irrigation (Table 15).

3.34 The DA said that the criteria for prioritizing new irrigation projects and the rehabilitation of existing irrigation projects are: i) impact on poverty incidence of the province/region; and ii) subsistence incidence. But a closer look at the irrigation projects of the National Irrigation Administration (NIA) bears regional disparities in terms of irrigation investments. The poverty-stricken regions of ARMM and CARAGA for instance, which has a large percentage of unirrigated areas , are allocated only 4.6 percent each of the total 2007 NIA program. On the other hand, the CAR had the least amount of irrigable area but received the largest share of NIA investments. Bicol and Region IV received an almost equal allocation with Regions 9, 10, 11, 12 & 2 even if the latter regions have smaller percentage

Table 16. Regional Disparity in Irrigation Outlays

Regions	Potential Area to be developed as of Dec 2006 (ha)	Actual Irrigated Area as of June 2007 (ha)	Variance (ha)	Variance % share of potential area	Irrigation Program Outlay (in thousand peso) of NIA*	% share of NIA program outlay
CAR	19,485	16,022	3,463	17.8	1,591,742	16.1
1 Ilocos	97,796	29,782	68,014	69.5	1,234,623	12.5
2 Cagayan	273,739	146,903	126,836	46.3	342,779	3.5
3 C. Luzon	229,724	128,544	101,180	44.0	369,779	3.7
4 S. Tagalog	123,725	22,111	101,614	82.1	309,779	3.1
5 Bicol	120,685	20,682	100,003	82.9	365,779	3.7
6 W. Visayas	119,444	47,546	71,898	60.2	1,145,337	11.6
7 C. Visayas	21,812	2,905	18,907	86.7	1,744,969	17.6
8 E. Visayas	31,364	14,084	17,280	55.1	657,375	6.6
9 Zamboanga	39,237	25,005	14,232	36.3	309,779	3.1
10 N. Mindanao	68,237	30,964	37,273	54.6	309,779	3.1
11 Davao	95,283	48,850	46,433	48.7	309,779	3.1
12 Soccsksargen	209,548	80,506	129,042	61.6	309,779	3.1
ARMM	134,008	12,793	121,215	90.5	450,856	4.6
CARAGA	114,886	14,958	99,928	87.0	450,856	4.6
TOTAL	1,698,973	641,655	1,057,318	62.2	9,902,990	100.0

Source: National Irrigation Administration Mid-year Report 2007
* Estimates

share of potential irrigable area (Table 16) and lower poverty incidence rates.

3.35 Despite public investments in irrigation for the past years, the share of irrigated land to total potential irrigable land remains at 40 percent. As of December 2006, NIA reported that the total service area covers 1.4 million hectares out of 3.13 million hectares of irrigable area. This is still way below the physical target as stated in the Agriculture and Fisheries Modernization Program (AFMP) Plan to raise the country's service area to 1.6 million hectares. At the rate by which NIA generates irrigated areas—at 0.45% yearly increment in irrigation development, it would be a huge challenge to effectively expand the irrigated service areas.

3.36 While communal irrigation program is already devolved to and maintained by the LGUs, the National Irrigation Administration (NIA) still provides free assistance to those LGUs that are less capable of maintaining communal irrigation system. Since, the NIA does not have a budget for this type of activity, it sources its funding from the non-tax revenues it generates from other activities.

Energy

3.37 Total government expenditures for power and energy grew by 64.4 percent, increasing from P2.64 billion in 2006 to P4.34 billion in 2008. Consequently, the share of energy expenditure in the government expenditure program increased from 0.25 percent to 0.35 percent during the same period. Beginning 2005, the infrastructure budget of the National Electrification Administration (NEA) has been increasing to support the Rural Electrification Program. Thus, its share in total energy infrastructure spending has also been increasing and averaged 72.6 percent from 2005 to 2008. NEA's infrastructure budget amounted to P2.50 billion in 2007 and will rise to P6.32 billion in 2008. This represents a considerable 152.7 percent growth despite the decrease in budgetary support (subsidy) from P602.4 million to P322.4 million.

Rural electrification

3.38 The Department of Energy (DOE) has two locally-funded projects, namely, the Barangay Electrification Program and the Remote Area Electrification Program for off-grid areas. The National Electrification Administration (NEA) has

Table 17. Power Sector Infrastructure Budget (in thousand pesos)

Particulars	2003	2004	2005	2006	2007	2008
DEPT OF ENERGY	***11,384,427***	***6,777,351***	***3,730,958***	***5,923,347***	***6,012,307***	***6,470,417***
National Electrification Administration						
Rural Electrification	70,880	312,578	2,327,504	5,245,923	2,502,400	6,322,400
National Power Corporation Power and Energy	11,289,559	6,443,414	1,260,938	643,913	388,170	……
Philippine National Oil Company Power and Energy	23,988	21,359	142,516	33,511	3,121,737	148,017
Total Public Sector Infra Budget	**123,744,728**	**106,175,044**	**96,054,984**	**110,507,603**	**132,624,499**	**140,870,546**
NEA Infra Budget as % of Energy Infra Budget	*0.6*	*4.6*	*62.4*	*88.6*	*41.6*	*97.7*
DOE Infra Budget as % of Total Public Sector Infra Budget	*9.2*	*6.4*	*3.9*	*5.4*	*4.5*	*4.6*

Source: BESF, DBM 2008

Table 18. Status of Barangay Electrification, as of August 31, 2007

Franchise Holder	Number of Barangays	# of Barangays Energized	Remaining Barangays Unenergized	Percent Energization
119 Electric Cooperatives	36,030	34,235	1,795	95.02%
MERALCO	4,322	4,260	62	98.57%
24 Private / LGU-owned / other	1,628	1,591	37	97.73%
PHILIPPINES	**41,980**	**40,086**	**1,894**	**95.49%**

Sources: DOE, NEA, ECs

Note: Total number of barangays was taken from NSCB.

also its own electrification program implemented through the electric cooperatives for on-grid areas attached to the main distribution wires of cooperatives (Table 17). As of August 2007, 40,086 out of the country's 41,980 barangays have already been energized. The energization level for Luzon, Visayas and Mindanao is at 97.3 percent, 97.1 percent and 90.0 percent, respectively(Table 18). Total electrification is targeted in 2008, but this has been re-scheduled to 2009 due to lack of funds. It takes about P2 million to energize a barangay. For 2007, only half of the 301 barangays targeted for energization have been completely energized due to inadequate budget. For 2008, only 160 barangays are targeted for energization with the government's infusion of P322 million to the NEA as subsidy to 120 electric cooperatives (ECs).

3.38.1 Compared to Luzon and Visayas, the percentage of Mindanao's population that has little access to electricity is sizeable. Thus in 2007, the National Electrification Administration (NEA) has targeted 192 barangays in Mindanao alone. Mindanao has incidentally the highest amount of committed energy infrastructure projects/ investments in 2007 which totals P16.8 billion and accounts for 68.1 percent of total committed energy investment for the year. However, this commitment may not be realized this year due to inadequate funding. For 2008, the Visayas region is expected to benefit from energy investments totaling P26.0 billion, accounting for 85.3 percent of total investment. Since Mindanao has the highest number of barangays that are still unenergized, it might be more judicious to keep the focus on Mindanao in reaching the far-flung barangays.

Table 19. Barangay Electrification, by Region: as of August 31, 2007

REGION	Potential Barangays	Electrified Barangays	Unelectrified Barangays	Electrification Level (%)
NCR	1,694	1,694	0	100.00
CAR	1,176	1,122	54	95.41
I	3,265	3,264	1	99.97
II	2,311	2,219	92	96.02
III	3,102	3,092	10	99.68
IV-A	4,012	3,946	66	98.35
IV-B	1,457	1,350	107	92.66
V	3,471	3,246	225	93.52
Luzon	**20,488**	**19,933**	**555**	**97.29**
VI	4,050	4,008	42	98.96
VII	3,003	2,999	4	99.87
VIII	4,390	4,098	292	93.35
Visayas	**11,443**	**11,105**	**338**	**97.05**
IX	1,904	1,724	180	90.55
X	2,020	1,918	102	94.95
XI	1,160	1,155	5	99.57
XII	1,194	1,103	91	92.38
CARAGA	1,310	1,279	31	97.63
ARMM	2,461	1,869	592	75.94
Mindanao	**10,049**	**9,048**	**1,001**	**90.04**
Philippines	**41,980**	**40,086**	**1,894**	**95.49**

Source: NEA

3.38.2 The actual number of barangays that remain unenergized may not be exact because their targets are projected based on the 2000 Census of Population. But whatever the bottom number is, the point remains that all barangays should be energized because provision for electric services yields more opportunities for improved quality of life, greater access to basic services and better infrastructure for rural development. A study points out that the rural poor often pay more per cubic meter of water or kilowatt-hour of power because in some cases, they source power from informal private suppliers.[12] In these instances, focusing energy infrastructure delivery on the rural poor becomes all the more important. Also, while all inter-grid cross subsidies have already been eliminated, there is still a need to complete the removal of all inter-class cross subsidies. At present, of the 124 distribution utilities across the country, there are still 3 remaining DUs wherein industrial and commercial consumers continue to subsidize residential users.

[12] Londero, E.(2003)

Furthermore, it is also the government's responsibility to ensure that regulation policies strike a balance between ensuring improvements in welfare and avoiding the creation of regulatory barriers to entry.

Electricity rates

3.39 The passage of the Electric Power Industry Reform Act (EPIRA) in 2001 was a milestone in improving legal infrastructure in the power industry in the country. It was aimed to help ensure the quality and reliability of electricity in the country and to bring about reasonable power rates for consumers. One of the major accomplishments of EPIRA was the containment of the losses incurred by the National Power Corporation (NPC). In addition, the government was able to complete the privatization of 9 of NPC's hydroelectric plants, negotiate Transition Supply Contracts between NPC and various distribution utilities, and launched the Wholesale Electricity Spot Market (WESM).

Table 20. Comparative electricity tariffs, (US cents/kWh)

Country	Residential		Industrial		Date
	Low	High	Low	High	
Malaysia	5.9	8.5	3.9	6.4	2006
Hong Kong	11.1	13.9	8.1	9.1	2006
Korea	6.1	19.9	5.1	6.7	2006
Singapore		13.3	6.6	11.8	2006
Cambodia	8.4	15.6	11.5	14.4	2005
Thailand	4.8	8.0	3.2	9.7	2006
Indonesia	1.5	4.1	1.5	3.6	2005
Vietnam	2.7	7.7	2.7	13.1	2005
Lao PDR		2.7		2.5	2005
Myanmar		7.3		7.3	2005
Japan	12.9	18.0	10.2	11.2	2006
China	6.0	6.1	6.6	8.7	2006
Philippines		17.4	12.8	16.7	March

Source: DOE

The country's power sector, however, continues to be hounded by a number of difficult issues. For instance, electricity tariffs in the country is still one of the highest in Asia partly due to its continued dependence on imported fuel for its power plants and the failure to introduce competition in the sector. While the country has started to reduce its dependence on imported fuel, efforts to increase use of indigenous natural gas and introducing alternative energy sources such as wind power and biomass are yet to be vigorously pursued.

3.40 The DOE's latest power supply and demand projections also forecast the possibility of a power shortage. In 2008, the Visayas grid will be already short of the required capacity while power shortages are likely to happen in Mindanao by 2009 and in Luzon by 2011, if no new capacity is added. However, even with the improved fiscal position, the high cost of building new plants makes it very difficult for the country to fund the necessary expansion of the country's power infrastructure, thus making it imperative for the government to encourage greater private sector participation in the power industry.

Privatization

3.41 The Power Sector Assets and Liabilities Management Corporation (PSALM) is the state agency overseeing the sale of Philippine power assets. The privatization of 31 of Napocor's generation plants as well as Transco's national power grid is expected to generate up to $5 billion for the government and cut the public sector debt. Privatization is also expected to bring about a more efficient and competitive generation sector. To date, however, PSALM has only sold nine generation plants amid investors' doubts about the sector's profitability. Proceeds from the privatization of the nine plants so far have reached $2.38 billion.

WESM

3.42 Section 30 of the EPIRA called for the creation of a Wholesale Electricity Spot Market (WESM) to create a competitive, transparent and reliable trading environment that will attract investments and encourage healthy competition. After more than a year of preparation and testing, the WESM finally commenced full commercial operations for the entire Luzon grid on June 26, 2006. At present, the Philippine Electricity Market Corporation (PEMC) which operates the WESM is currently conducting trial operations for the Visayas WESM, the full commercial operations of which is targeted by January 2008. Preparations are also being undertaken for the establishment of a WESM reserve market with the petitions for such currently being reviewed by the Energy Regulatory Commission(ERC).

3.43 In September of 2006, concerns were raised over possible price-fixing by the Power Sector Assets and Liabilities Management (PSALM), Corporation which controls about 40 percent of the power plants participating in the WESM. Although the subsequent investigations conducted by the ERC found no evidence against PSALM for anti-competitive behavior and market power abuse, the rising rate of the WESM seems to indicate a lack of competition in the Spot Market and could serve as a disincentive towards greater private sector participation in the power sector. Reducing the government's share in the Spot Market by completing the privatization of the 70 percent of government-owned generating capacity as mandated in the EPIRA should help reduce the risk of anti-competitive behavior in the future.

Retail competition and Open Access

3.44 While EPIRA called for the implementation of retail competition and open access in the electricity sector not more than three years after its effectivity, this has not yet happened because some of the preconditions set by the law have not yet been met. The slow pace of privatization of the NPC generating assets has effectively set back the implementation of retail competition and open access. The last remaining bottlenecks for the implementation of open access is the privatization of 70 percent of the total generating capacity of NPC in Luzon and Visayas as well as the transfer of management and control of 70 percent of NPC-IPP generating capacity to IPP administrators.

IV. Insights and Recommendations

4.1 To sustain the momentum of the robust macroeconomic performance of the country in the past two years, it is important to pursue further tax policy and administrative reforms to help ensure fiscal stability. In addition, budget planning and execution capability of line agencies must be improved keeping in mind the overarching goals of enhancing the quality of basic social services delivery, human resource capacity and creating an enabling environment for private sector development through the provision of infrastructure. Given the high annual population growth and unequal distribution of income, it will take a higher and sustained growth path to make significant progress in the economy and to alleviate poverty in the country.

4.2 Fiscal adjustment programs such as the VAT reform law may be good as revenue-enhancing measures for the country, but they are not enough. It is also important that the government strengthen tax collection and administration. These are fundamental issues that have not been squarely addressed by the government as manifested in the persistent shortfall in tax revenue collection. It is recommended that the government make that tough decision to pursue reforms in the BIR. In addition, there is a need to improve the accuracy of revenue forecast by upgrading the quality of BIR database. This can be done by developing a system that can capture and analyze data at district level.For instance, the BIR has difficulty computing for revenue collected from domestic common carriers' tax due to misclassification of tax remittances at the district level.

4.3 Moreover, the DBM must ensure cohesiveness in budget planning through proper identification of poverty-reducing programs that are coherent with national development agenda. To maximize the benefits to the poor derived from the programs activities and projects (PAPs) of the government, the budget must reflect priorities identified in the agencies' plans and in the MTPDP. Better medium-term expenditure planning and budgeting would make overall budget management and expenditure allocation more responsive to national priorities. Currently, resource planning and implementation constraints are threatening public investment in core poverty-reducing public programs.

4.4 Increasing sectoral allocations particularly on health will not necessarily improve service delivery and reduce poverty. To attain the aforementioned goals the government must focus on providing strategic public goods, and must address issues of equity. At the subsectoral level, allocations in health appear to be deteriorating on both equity and efficiency grounds, while expenditures in education seem to be moving in the right direction by supporting productivity and focusing on the poor. The health sector concerns are reflected in a decline in expenditures on preventive care from 26.4 percent of the total DOH budget in 2001 to 14 percent in 2007; but it increased to 28 percent in its 2008 budget. However, this significant increase is not sufficient compared to its 2001 level to cover the various health services needed by the poor, i.e., immunization, tuberculosis control, and in improving infant and maternal mortality rates in the country. It is recommended that DOH improve its regional budget allocation process to match Infant Mortality Rate and poverty incidence by region.

4.5 It has been common practice in the country's public finance that taxpayers bail out i) multimillion dollar loans that financed infrastructure projects including troubled corporations owned or controlled by the government, ii) losing BOT and BLT projects that are guaranteed a fixed rate of return through re-capitalization and debt assumption or shoulder the cost of having to sell some of these corporations at a fraction of what Government spent for them. Notable examples in recent years include the railway projects, Philippine National Bank, the old Central Bank, the National Power Corporation, etc. In many cases, the problems have built up over an extended period—and recurred even after bailout. Because macroeconomic stability is dependent on the effective management of fiscal risks, achieving and maintaining fiscal discipline is critical; this in turn will depend on how effectively contingent liabilities are managed. Hence, it is recommended that a complete quantification of contingent liabilities be made and a centralized risk management unit or a debt management unit in DOF in coordination with the Bureau of the Treasury be established.

4.6 Anecdotal evidence suggests that decentralization has encouraged greater innovation at the local level, strengthened local management capability, and promoted greater cooperation with the private sector and other LGUs. However, preliminary evidence also suggests that, despite these achievements, institutional arrangements for service delivery remain unclear in many cases, with national agencies playing a significant role in some functions that should have been fully devolved to LGUs. For instance, there is a mixed trend in health services among LGUs. There are LGUs that are wallowing in a deplorable situation in terms of health care services to the extent that sanitary cotton is not even available such as in the case of a provincial hospital in Samar. But there are also LGUs that are champions in prioritizing health care services over personal and often whimsical programs that have very little or zero impact on improving the welfare of the poor. Clearly, there are LGUs that are not financially and technically ready for the provision of basic social services and there are those that are way ahead in the game. But clearly it is the poor who suffer from all these inefficiency and equity issues. Devolution of health services to the LGUs needs revisiting and re-consideration given the deplorable health service delivery at the local level. Overall health budget, both national and local, does very little in addressing the needs of the poor particularly in the rural areas mainly because the LGUs do not provide adequate resources for health.

4.7 Improving LGU capacity to deliver basic services seems to be hinged on four critical factors: (i) on the revenue side, improved assessment and collection of revenues from local sources to reduce LGU dependence on IRA; (ii) on the expenditure side, strengthening planning, investment appraisal, procurement, and financial management; (iii) improving the quality of LGU public administration by controlling wage bill expenditures and strengthening LGU administrative capacity, accountability, and oversight; and (iv) replicating innovative LGU practices in managing revenues, expenditures, and personnel, and promoting greater competition between jurisdictions. All of this require long-term capacity building.[13]

4.8 Infrastructure is a key factor to enhancing the long-term growth potential of the economy. It is also essential to improving the ability of the poor to benefit from and contribute to growth, and therefore lead to reduction in poverty. However, while the evidence on infrastructure development is broadly positive, there is a need to ensure that the money allotted for these programs will be used efficiently and not be a tool for corrupt practices.

[13] Philippines: Improving Government Performance: Discipline, Efficiency, and Equity in Managing Public Resources, A Public Expenditure, Procurement, and Financial Management Review. 30 April 2003. A Joint Document of the Government of the Philippines, the World Bank, and the Asian Development Bank.

Benefits have often been less than anticipated, especially because of inadequate attention to governance and institutional frameworks.

4.9 The MTPDP identifies priority sectors/areas of infrastructure investment. It is focused on developing transport infrastructure and railway systems in Metro Manila and Central Luzon and access to tourist areas. This seems to be inconsistent with the data on access to basic infrastructure services and facilities. Various studies have indicated the regions and municipalities where poor people have less access to basic infrastructure services such as access to safe drinking water and sanitation facilities but results of these studies do not seem to significantly influence planning and policy formulation in government. What good does it serve having paved roads to tourist destinations if there is no safe water to drink in these areas?

4.10 In addition, the importance given to digital infrastructure to improve connectivity in all levels of government has proven to be costly to the people citing as a glaring example the recent controversy on the broadband deal that the government entered into. Prioritization in infrastructure projects seems to be skewed toward projects which are attractive in terms of glamour and hype. Attention to the more basic infrastructure services which are evidently lacking especially in poor regions and municipalities is scant. Furthermore, despite the marked improvement in real GDP, infrastructure spending in real terms has been very minimal. This reflects how little the budget allocated for infrastructure can do in improving access to basic infrastructure especially to the rural poor. The following are areas requiring further attention to improve outcomes in the delivery of infrastructure services, to wit:

4.10.1 Eliminate regional disparities in terms of access to road infrastructure in the country by focusing on the regions that have the most number of bad roads and high poverty incidence. It has been proven in studies conducted that high regional poverty incidence is highly correlated with poor infrastructure in the regions. The cost of road construction and the quality of roads constructed should also be looked into as to whether or not it is reflective of the true value of money.

4.10.2 The Department of Agriculture should strictly follow the criteria for prioritizing new irrigation projects and the rehabilitation of existing irrigation projects, to wit: i) impact on poverty incidence of the province/region; and ii) subsistence incidence. A closer look at the irrigation projects of the National Irrigation Administration (NIA) bears regional disparities in terms of irrigation investments.

4.10.3 The NIA should also be allowed to collect fees from LGUs which are less capable of maintaining communal irrigation system and are provided with technical assistance by the NIA. A budget line item for this type of activity should therefore be provided by the DBM.

4.10.4 Provide more funding to complete rural electrification with priority to be given to those barangays which are severely poor.

4.10.5 To address high electricity rates in the country, the use of indigenous natural gas and introducing alternative energy sources such as wind power and biomass should be vigorously pursued.

4.10.6 Encourage greater private sector participation in the power industry to fund the necessary expansion of the country's power infrastructure in order to mitigate future power shortages in the country and to help reduce the risk of anti-competitive behavior in the future.

References

Arsenio M. Balisacan Ernesto M. Pernia. Economics and Research Department (ERD) Policy Brief Series No. 5: What Else Besides Growth Matters to Poverty Reduction? Philippines. ADB 2002.

Arsenio M. Balisacan Ernesto M. Pernia. Economics and Research Department (ERD) Working Paper No. 7. Probing Beneath Cross-National Averages: Poverty, Inequality, and Growth in the Philippines. ADB. March 2002.

Asian Development Bank

BESF Department of Budget and Management

Congressional Planning and Budget Office (2007). "2008 Budget Briefer: Infrastructure for All." CPBO, Quezon City, October 2007

Congressional and Planning Budget Office. "An Analysis of the President's Budget for FY 2007." Nov. 2006

Cook, C.C. 'The Role of Infrastructure and Infrastructure Services in Poverty Reduction', background paper for the ADB Poverty Reduction Strategy Review. 2003

Department of Budget and Management (2008). National Expenditure Program: Fiscal Year 2008

_________. Budget of Expenditure and Sources of Financing: Fiscal Year 2008

Department of Energy (2006). "Philippine Energy Plan 2006 Update." DOE, Taguig

Department of Energy (2007). "10th Status Report on EPIRA Implementation." DOE, Taguig

Department of Finance

Department of Transportation and Communication (2008). Matrix of Final Output

Ifzal Ali Ernesto M. Pernia. ERD Policy Brief Series No. 13: Infrastructure and Poverty Reduction. What is the Connection? ADB 2003

Llanto, Gilbert. " Overcoming Infrastructure Constraints to Economic Growth in the Philippines". Asian Development Bank Draft Inception Report on Searching for Binding Constraints on Sustainable Growth in the Philippines. August 2007.

Londero, E. "Measuring Benefits, Tracing Distributative Effects and Affecting Distributional Outcomes." paper presented at ADB Institute. 2003

National Irrigation Administration. Mid-Year Report 2007

National Statistics and Coordination Board

National Economic and Development Authority

National Statistics Office

National Anti-Poverty Commission

Philippine Institute for Development Studies

Philippines: Improving Government Performance: Discipline, Efficiency, and Equity in Managing Public Resources, A Public Expenditure, Procurement, and Financial Management Review. 30 April 2003. A Joint Document of the Government of the Philippines, the World Bank, and the Asian Development Bank.

Romero, Segundo. "Civil Society-Oriented Measures for enhancing Transparency and Accountability in Governance and the Civil Service." Undated paper.

Senate Economic Planning Office (2006). A Profile of Philippine Government-Owned and –Controlled Corporations.

Senate Economic Planning Office (2006). 2006 2nd Quarter Economic Report: Infrastructure Spending and Philippine Development, October 2006

World Bank. "Philippines: Meeting Infrastructure Challenges." 2005

World Competitiveness Yearbook. Various Years

World Bank. "Philippines: Invigorating Growth, Enhancing its Impact." March 2007

Xianbin Yao. ERD Policy Brief Series No. 14 Infrastructure and Poverty Reduction —Making Markets Work for the Poor. ADB. May 2003

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