



UP School of Economics

Discussion Papers

Discussion Paper No. 2023-01

May 2023

**Public-Private Partnership
Physical, Social, and Human Infrastructure
In the Philippines**

by

Ernesto M. Pernia* and Marianne C. Sales**

* Professor Emeritus, U.P. School of Economics, Diliman, Quezon City

** Graduating Senior Student, U.P. School of Economics, Diliman, Quezon City

UPSE Discussion Papers are preliminary versions circulated privately
to elicit critical comments. They are protected by Republic Act No. 8293
and are not for quotation or reprinting without prior approval.

Public-Private Partnership Physical, Social, and Human Infrastructure In the Philippines

Ernesto M. Pernia* and Marianne C. Sales**

*Professor Emeritus, U.P. School of Economics, Diliman, Quezon City

**Graduating Senior Student, U.P. School of Economics, Diliman, Quezon City

Abstract

Partnership between the public and private sectors, the main constituents of the economy, is not only logical but seems like a natural institutional arrangement. It can be a symbiotic relationship which brings about mutually beneficial processes and outcomes that redound to the economy and society-at-large. Among the three types of infrastructures, human is evidently the most vital and of the highest priority, followed by social infrastructure which directly undergirds human development that begins in the womb, and physical infrastructure required to buttress the country's social and economic growth sustainably. This essay discusses physical infrastructure at length followed by human capital and social infrastructure.

**Public-Private Partnership
Physical, Social and Human Infrastructure
in the Philippines**
by
Ernesto M. Pernia*
and
Marianne C. Sales**

Partnership between the public and private sectors, the main constituents of the economy, is not only logical but seems like a natural institutional arrangement. It can be a symbiotic relationship which brings about mutually beneficial processes and outcomes that redound to the economy and society-at-large, as evinced by the more advanced countries.

Among the three types of infrastructures, human is evidently the most vital and of the highest priority, followed by social infrastructure which directly undergirds human capital development from birth, and physical infrastructure needed to buttress the country's social and economic growth. Here the last cited -- physical infrastructure -- is the first to be taken up followed by human and social infrastructure.

Early Beginnings in Public-Private Partnerships

Physical Infrastructure

According to the Asian Development Bank (ADB), the Philippines was among the first in Asia to introduce public-private partnerships (PPPs) in the planning and execution of physical infrastructure projects, and at times also in their operation

*Ernesto M. Pernia, PhD is Professor Emeritus of Economics, University of the Philippines Diliman, and former Secretary of Socioeconomic Planning, National Economic and Development Authority, Philippines.

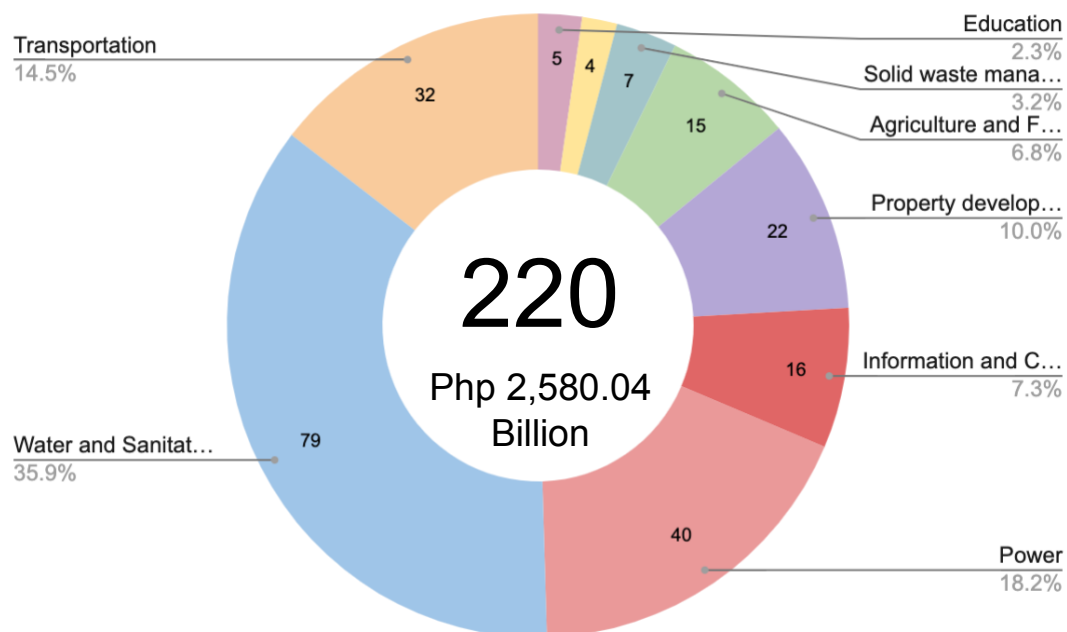
**Marianne C. Sales is a graduating senior student at the School of Economics, University of the Philippines Diliman.

and maintenance for a defined period of time. The start in physical infrastructure projects can be traced to as far back as President Cory C. Aquino's administration (1986-1992), going by the records of the Public-Private Partnership Center (PPPC).

The PPPC was formally established only soon after the start of President Benigno C. Aquino, Jr.'s administration, 2010-2016. It has been attached to the National Economic and Development Authority (NEDA), towards systematizing and further promoting PPPs in the context of the country's medium-term development plans.

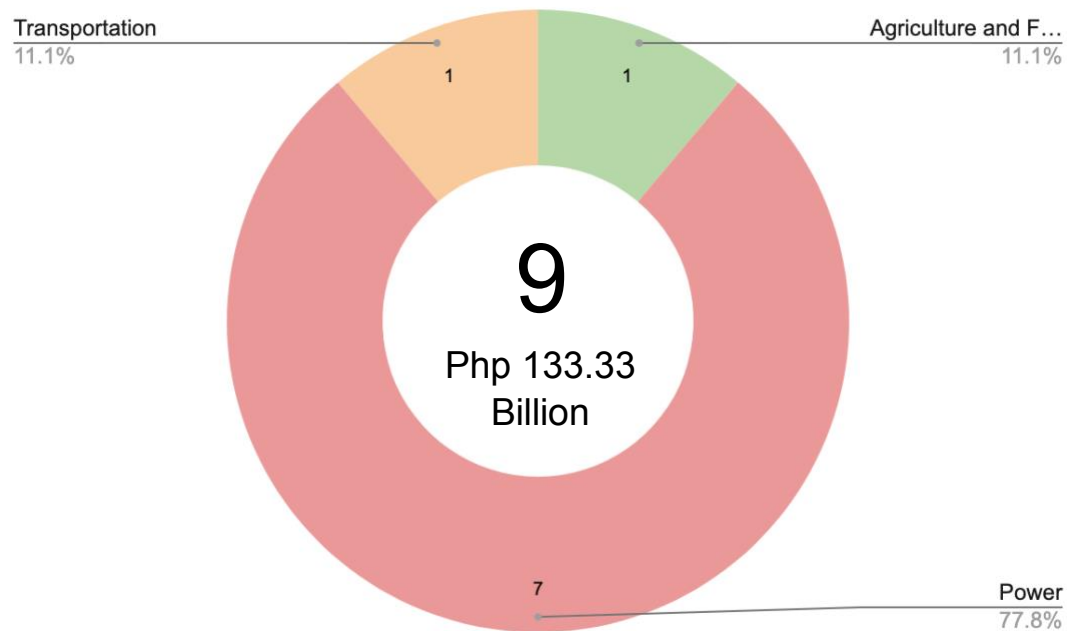
The PPPC has recorded a gross total of 220 awarded PPP projects (as of April 30, 2023) in various sectors and geographic locations from the late 1980s to 2023. Of the total, 79 were in water and sanitation, 40 in power, 32 in transportation (airports, rail, roads, terminal, and ports), 22 in property development, 16 in information and communication technology (ICT), 15 in agriculture and food security, 7 in solid waste management, 5 in education, and 4 in health. Aggregate cost estimate was Php2,580.04 billion.

Figure 1. Overview of PPP Projects 1986-2022



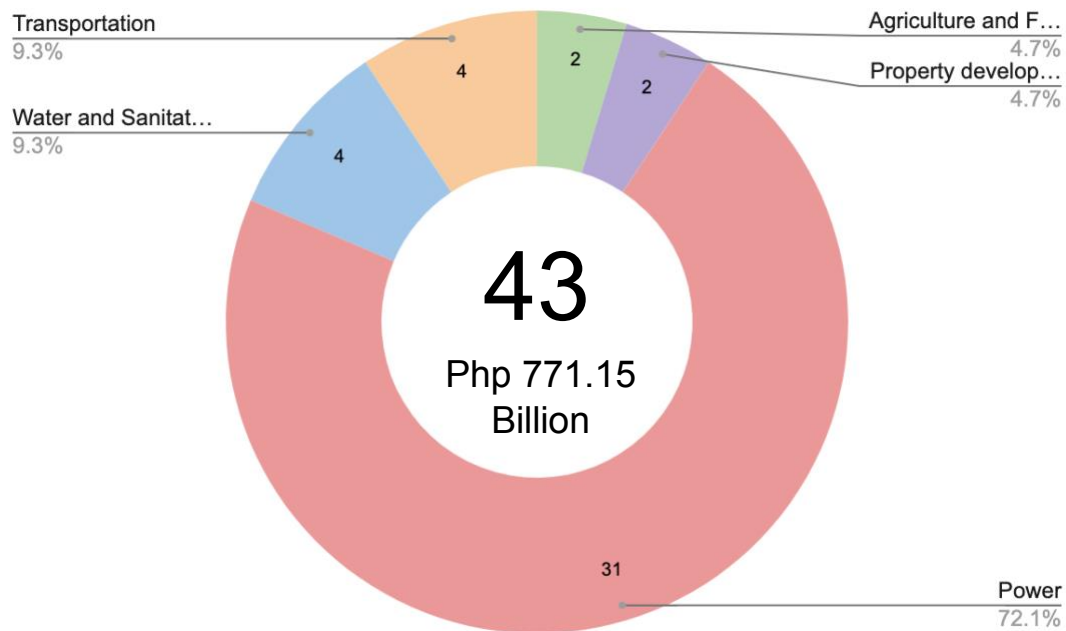
The start-up administration of President Cory C. Aquino (1986-1992) was able to implement 9 PPP projects – 7 in power and 1 each in transportation and agriculture & food security, of which 8 projects were solicited and 1 was unsolicited. In terms of location 4 were in Luzon outside NCR which by itself had 3, and 1 each in Mindanao and so-called multiple regions, none in the Visayas. Total cost was Php133.33 billion.

Figure 2. PPP projects under Pres. Cory Aquino



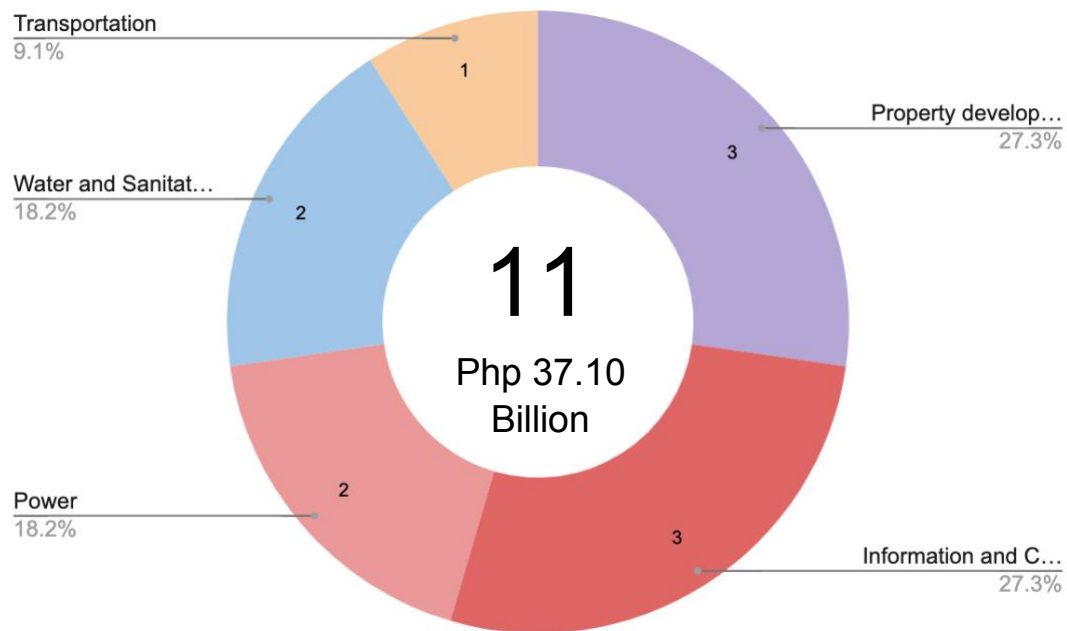
President Fidel V. Ramos' administration (1992-1998) delivered 43 projects – 31 in power, 4 each in transportation and water & sanitation, 2 each in property development and agriculture & food security. Of these projects 37 were solicited, 5 unsolicited, and 1 for verification. As to location, 18 were in Luzon outside NCR which had 9, 6 each in the Visayas and Mindanao, and 4 in multiple regions. Total cost was Php771.15 billion.

Figure 3. PPP projects under Pres. Fidel Ramos



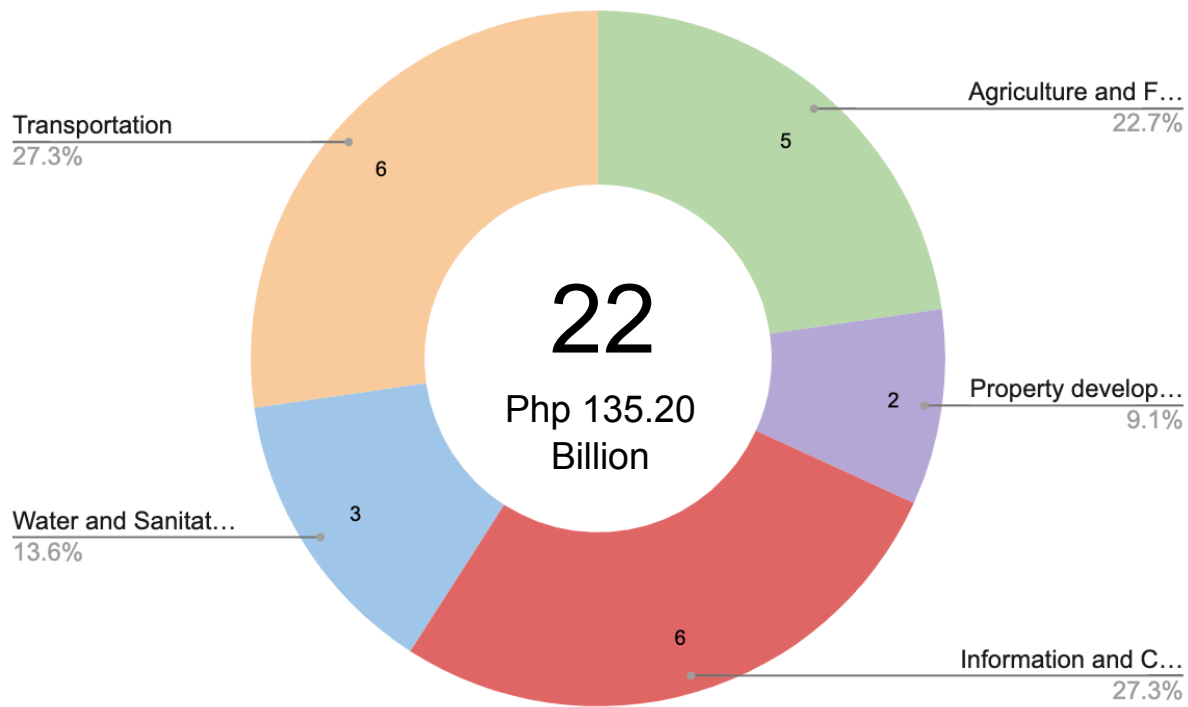
In the short-lived President Joseph E. Estrada's administration (1998-2001) 11 projects were recorded – 3 each in property development and ICT, 2 each in water & sanitation and power, and 1 in transportation. Six projects were solicited and 5 were unsolicited. By location, 6 were in Luzon, 3 in the Visayas, 2 in multiple regions, and none in Mindanao. Total cost was Php37.10 billion. It was the start of project implementation in ICT.

Figure 4. PPP projects under Pres. Joseph Estrada



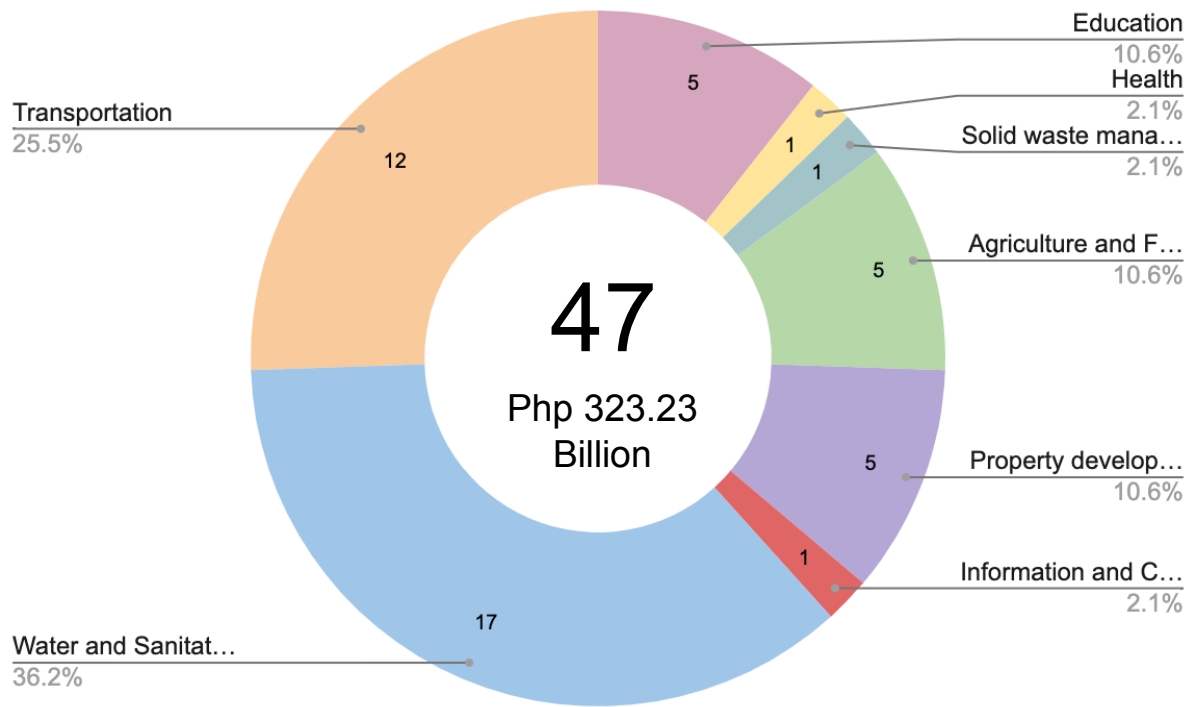
President Gloria M. Arroyo's extended administration (2001-2010) had a total of 22 projects – 6 each in transportation and ICT, 5 in agriculture & food security, 3 in water and sanitation, and 2 in property development. Five of these projects were solicited and 17 were unsolicited. In terms of location, 6 were in Luzon except NCR which got 2, 3 in the Visayas, 5 in Mindanao, and 6 in multiple regions. Total cost was Php135.20 billion.

Figure 5. PPP projects under Pres. Gloria Arroyo



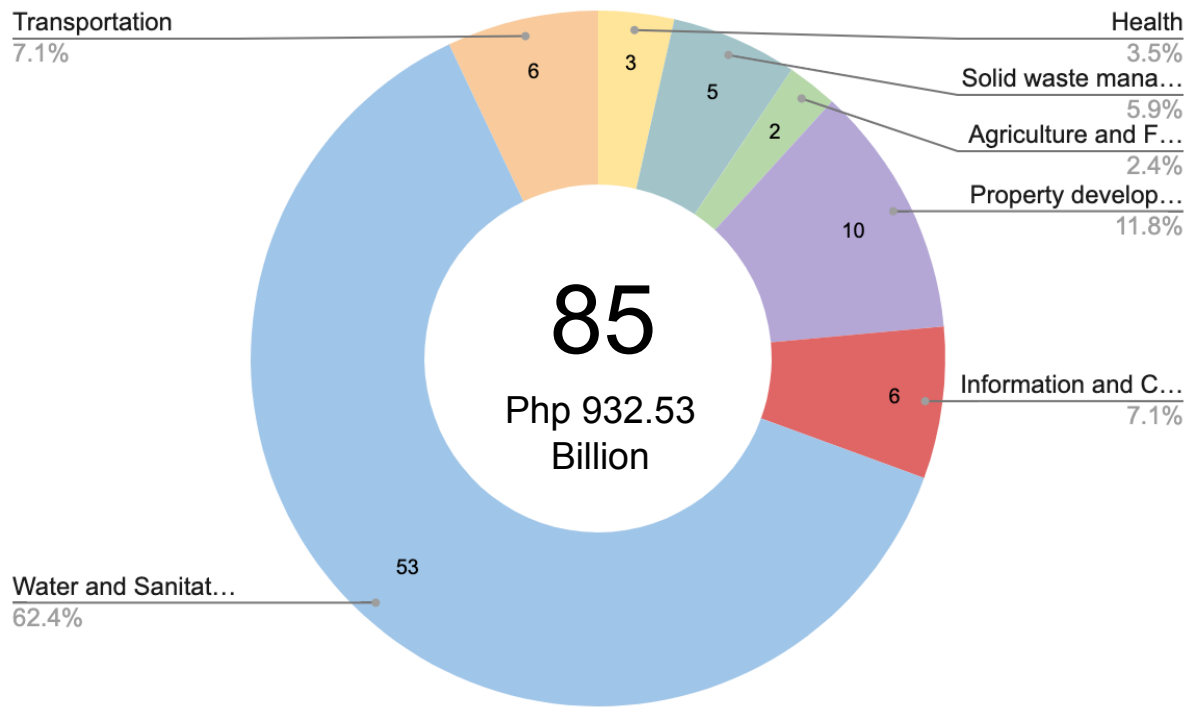
In President Benigno C. Aquino, Jr.'s administration (2010-2016) there were 47 projects – 17 in water and sanitation, 12 in transportation, 5 each in property development, education, and agriculture & food security, and 1 each in health, ICT, and solid waste management. Of these projects, 23 were solicited and 23 others were unsolicited, and 1 for verification. By location, 20 were in Luzon except NCR which had 12, 7 in the Visayas, 6 in Mindanao, and 2 in multiple regions. Total cost was Php323.23 billion. This is the first administration that implemented PPP projects in education as well as in health.

Figure 6. PPP projects under Pres. Benigno Aquino, Jr.



Under President Rodrigo R. Duterte's administration, there were 85 projects – 53 in water and sanitation, 10 in property development, 6 each in transportation and ICT, 5 in solid waste management, 3 in health, and 2 in agriculture and food security. Of these projects, 8 were solicited and 77 were unsolicited. As to location, 52 were in Luzon except NCR which got 11, 16 in the Visayas, 5 in Mindanao, and 1 in multiple regions. Total cost was Php932.53 billion.

Figure 7. PPP projects under Pres. Rodrigo Duterte

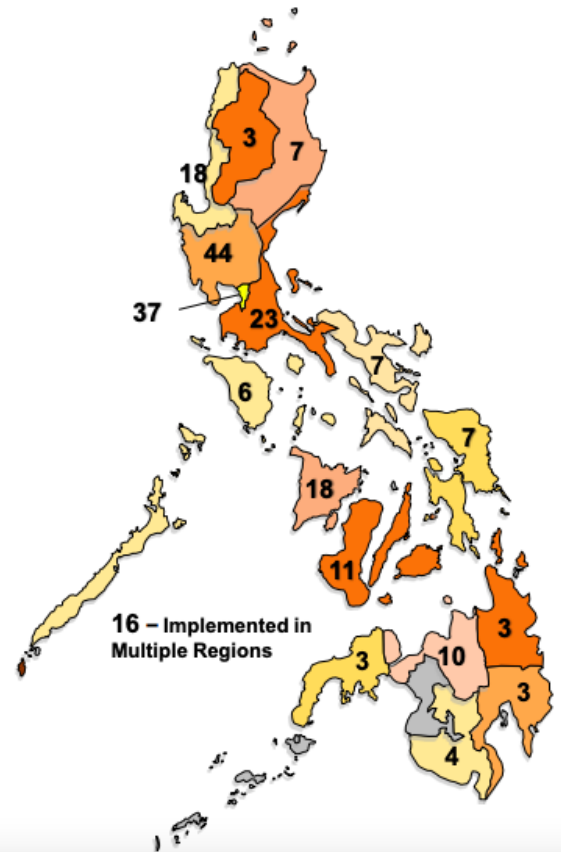


Finally, the new administration of President Ferdinand R. Marcos, Jr. (2022-) has initiated 3 projects – 2 in transportation and 1 in solid waste management, which are all unsolicited, with 2 in Luzon (outside NCR), 1 in the Visayas, and none in Mindanao. Total cost is Php 247.50 billion.

Figure 8 depicts the distribution of PPP projects across the regions of the Philippine archipelago.

Figure 8. Regional Distribution of PPP Projects

MULTIPLE REGIONS	16
LUZON	145
Region I	18
Region II	7
Region III	44
Region IV-A	23
Region IV-B	6
Region V	7
Cordillera Administrative Region	3
National Capital Region	37
VISAYAS	36
Region VI	18
Region VII	11
Region VIII	7
MINDANAO	23
Region IX	3
Region X	10
Region XI	3
Region XII	4
CARAGA	3
ARMM	0
TOTAL	220



Source: Public-Private Partnership Center's database.

While the listing of projects by sector, procurement mode, and location are attributed to each administration, one or more projects completed under one administration may have been initiated in the previous administration. This is especially true in the case of major flagship projects that take quite long to finish. Hence, the attribution of projects to, or claim by, an administration is not usually kosher. Another thing to note is that a project costing Php2.5 billion or higher has to undergo strict evaluation by the Investment Coordination Committee (ICC), comprising the Department of Finance as chair, the NEDA as vice-chair, Department of Budget and Management, PPP Center, and with the participation of the responsible agency as sponsor. Smaller projects costing below Php2.5 billion – typically those in LGUs in the provinces – are usually assessed and decided on by the concerned LGUs with the help of the PPP Center. Projects in this genre often have to do with, e.g., water and sanitation, solid waste

management, and small property development. By contrast, projects upwards of Php2.5 billion are often in transportation, and power, etc.

Further to the administration of President Ferdinand R. Marcos, Jr., some 194 infrastructure flagship projects (IFPs) have been announced by the NEDA, of which 71 are carryovers from the Duterte administration. Of this total number of IFPs, 45 are full PPPs and 2 are hybrid (i.e., funding from the government appropriations act (GAA) or official development assistance (ODA) for construction, and PPP for operation and maintenance (O&M). The announcement added that these IFPs will cost a grand total sum of Php 9 trillion presumably till the end of this administration.

Human and Social infrastructure

Public-private partnership in physical infrastructure is talked about more often and more widely in policy or social discourse than are human and social infrastructures. And the budget allocation for physical infrastructure often visibly dwarfs those for social and human development. Yet in terms of priority of nature (*prioritas naturae*) and of order (*prioritas ordinis*), human capital and social infrastructure take precedence.

Overall, our country's three principal types of infrastructure – human, social, and physical -- sorely need major enhancements to be in step with its ASEAN neighbors. Which calls for resolute attention from the government, private sector, and society-at-large along with the requisite budgetary support. A veritably huge challenge, given the government's binding fiscal constraints, recently with debt-to-GDP ratio at around 63.7 percent and budget deficit hovering at 6.5 percent.

Human Infrastructure

A child's human capital development begins in the early stage of a mother's pregnancy and becomes more manifest at 0-5 years of age. At birth the size of a

baby's brain is said to be a quarter that of an adult's brain. Subsequent growth is so fast that by age 5 a kid's brain is already 90 percent of the adult's brain.

However, it is reported that in our country one-third (1/3) of 0-5 aged children are stunted or underweight owing to malnutrition; hence, unable to reach their full potential in later years. Nothing new but it remains a serious problem plaguing especially the poor, calling for urgent attention and adequate budgetary support. Just recently the government decided to borrow Php 10 billion from the World Bank to fund the Philippine multi-sectoral nutrition project (PMNP) to address the malnutrition issue. Which raises the question: why not fund it from the national budget given its priority and vital importance?

Self-rated poverty surveys (138 in all) conducted by the Social Weather Stations reveal that while overall poverty was at 54 percent of households in 1983, it was down to only 51 percent in 2022, a measly reduction of four points for all of four decades (Mangahas, 2023). Moreover, the food-poor are 34 percent of households (as of December 2022), and 41 percent do not have the education nor skills needed to earn sufficient wage. This reflects economic duality, i.e., the nation divided into the relatively well-off and the rest, 30-40% of households, in deep and grinding deprivation, which is double the recent official national poverty rate of 18.1%.

An earlier World Bank (2022) pandemic-related report reveals that 91 percent of children at 10 years of age are unable to read and understand a short and simple text, putting the Philippines at the bottom of 10 Asian countries on *learning poverty*. Singapore is at the top followed by South Korea, Japan, Vietnam, China, Thailand, Malaysia, Indonesia, and India, in that order. The Philippines also ranks last in *learning deprivation* and third to the last in *schooling deprivation* (5 percent), just preceding Indonesia and India (both at 6.8 percent). Prior to the Covid-19 pandemic, the proportion of children at age 10 beset by such learning deficiencies was not much lower at 60-70 percent. The Department of Education recorded abt 29 million enrollees for basic education (K-12) in school-year (SY) 2021-2022, a 4 percent increase from the previous SY, accounting for over a

quarter of the country's total population, suggesting that public spending per student is a mere fraction of the corresponding spending in its ASEAN peers. Spending per student, compared with Indonesia, for example, is only 60 to 72 percent for primary and secondary levels, respectively. Compared with Malaysia and Thailand, Philippine spending is a smaller fraction still, not to mention the competency levels of teachers, appropriateness of curricula and learning materials. With subpar resources for schooling quality and outcomes, our country has performed poorly in international standardized student assessments (such as PISA). Relevant to the issue is quantity-quality trade-off, i.e., the larger the student population, the lower the learning capacity given budget constraints on teachers and learning materials, not to mention child nutrition — which is a unique problem of the Philippines in the ASEAN context (cf. “Accelerating Human Capital Development,” Chapter 10, Philippine Development Plan (PDP) 2017-2022, pp.137-160).

Social infrastructure

Schools, hospitals, specialized medical facilities (e.g., Virology and Vaccine Institute), and clinics, manned by well-trained teachers, equipped with appropriate paraphernalia, and a large enough cadre of medical doctors and properly compensated health care workers (HCWs) — are indispensable for human capital development. Social infrastructure needs to be adequately and equitably distributed nationwide with specialized hospitals, science high schools, and higher education institutions (HEIs) based in the main cities of the regions. This will be a major contribution to redressing the stark inequality and poverty across the regions (Pernia, 2022).

Over the past 6 presidential administrations – Cory Aquino to Rodrigo Duterte – there were only 5 projects in education and 1 in health under the Benigno Aquino, Jr. (PNoy) administration, and 3 in health under the Duterte administration. This only shows that social infrastructure projects via PPPs tend to be scarce as they are not as financially lucrative to private sector partners as are projects in physical infrastructure.

A serious and well-studied consideration of the state of human capital development in our country, as cited above, would suggest it entails massive and smartly allocated investments in social infrastructure with trained and well-suited personnel. This will enable the provision of quality education and healthcare services to both young and older people across the country.

Physical Infrastructure: A Reprise

This completes the infrastructure triad. It is also a costly undertaking but the advantage is that investment in physical infrastructure is more feasible via public-private partnerships (PPPs). It is crucial, though, that the conditions and guarantees imposed by the public sector on private sector partners are fair and sufficiently attractive for them to recover their investment costs and with reasonable returns. For instance, the more recent record of PPP projects under the PNoy administration, a few of which were completed under the Duterte administration, has been given the thumbs up by expert observers and the general public.

The current administration seems keen on undertaking PPP projects, especially given the economy's tight fiscal constraints. In fact, 194 so-called infrastructure flagship projects (IFPs) have already been announced by the President (c/o NEDA), 71 of which are carryovers from the previous administration, and 45 are PPPs. Additional funding source is to be tapped from official development assistance (ODA) involving Japan, United States, South Korea, Australia, and China to a limited extent. The announcement on the 194 IFP'S was accompanied by a putative budgetary support of Php 9 trillion through the end of the current administration.

The PPP modality has been adopted by a number of ADB developing member countries. A considerable advantage of the PPP mode for physical infrastructure is it frees up government funds for human capital development and social infrastructure — allowing them to get much more needed funding — a quantum improvement from the traditional budget allocation. Thus, prioritization should follow the infrastructure triad of human, social, and physical, in that order,

with the first buttressed by the second which, in turn, is facilitated by the third. This would make it possible — given the Philippines’ serious health and education crises with its largest population (vis-à-vis land area) besides being the fastest growing in ASEAN — for the infrastructure triad to vigorously advance our country’s socioeconomic and inclusive development (cf. ‘Reaching for the Demographic Dividend,’ PDP 2017-2022, Chapter 13, pp.197-2011).

The current PDP 2023-2028 appropriately cite key strategies and approaches for sustained economic development. First, “maintaining robust macroeconomic fundamentals for rapid economic recovery.” Secondly,-- and this ought to be underscored (ed.), “the vitality of the economy is only as good as the country’s health and educational systems.” And, third, “the whole-of-government and whole-of-society approach is fundamental to policy efficacy”.

References

- Asian Development Bank, n.d. "Public-Private Partnerships," (website) Manila.
- Mangahas, Mahar, 2023. "Dismal science, dismal research?," Social Climate, *Philippine Daily Inquirer* (April 1), p. A5.
- Pernia, Ernesto M. 2022. "Human, social, and physical infrastructure," Commentary, *Philippine Daily Inquirer* (August 19).
- Philippine Development Plan, 2017-2022, Chapter 10, "Accelerating Human Capital Development," pp. 137-160.
- Philippine Development Plan, 2017-2022, Chapter 13, "Reaching for the Demographic Dividend," pp. 197-2011.
- Philippine Development Plan, 2023-2028.
- Public-Private Partnership Center, 2023. "Awarded PPP Projects (as of April 30, 2023)."
- World Bank (with UIS), 2022. "Philippines Learning Poverty Brief," Washington, DC, June.