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Scrutinizing Urbanization Challenges in the Philippines through the Infrastructure Lens

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Scrutinizing urbanization challenges in the Philippines through the infrastructure lens

Adoracion M. Navarro*

Abstract

Managing urban growth in countries requires that leaders plan ahead using national physical plans that, among others, safeguard land for utilities and physical infrastructure decades ahead, deliberately configures transport networks (including strategic seaports, controlled expressways and, if necessary, railway extension to suburbs) in order to induce factor mobility, and actively targets the removal of slums and urban renewal. Given this, it appears that Philippine urban development planning and implementation have overly focused on housing and neglected other types of physical infrastructure. Moreover, the urban development plans of local government units are fragmented and lack complementarity. This paper traces the roots of this state of affairs, proposes alternative ways of responding to the urbanization challenges in the Philippines, and discusses how regional cooperation among ASEAN Plus Three countries can help countries like the Philippines respond to urbanization challenges.

Key words: infrastructure, urban development, urbanization, ASEAN Plus Three, regional cooperation

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Introduction

Finding that it is imperative for the ASEAN Plus Three countries to better plan the growth of their cities, the Network of East Asian Think-tanks (NEAT) working group spearheaded by Singapore invited academics from APT countries to share experiences and knowledge on their respective countries' urbanization process. The NEAT is a mechanism aiming to integrate research resources in East Asia, promote academic exchanges, and provide intellectual support for East Asian cooperation. It was established in 2002 during a meeting of the ASEAN Plus Three countries, the "Plus Three" being China, Japan and South Korea.

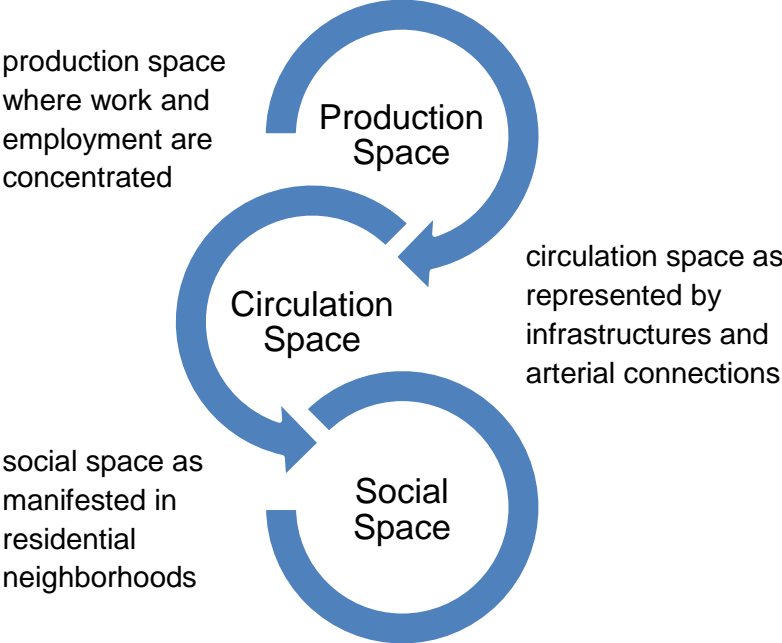
This Philippines country paper aims to discuss the key features and phases of the country's urbanization, assess the country's urban development efforts and challenges, describe the current plans, and recommend areas for regional cooperation by the ASEAN Plus Three countries. The thirteen country papers served as inputs to the NEAT report on "A New Wave of Urbanization: Challenges and Opportunities for Regional Collaboration." This country paper can also serve as inputs to further analysis by researchers and policymakers in the Philippines. In the NEAT exercise, the term "urbanization" is generally defined as the growth of towns and cities. This definition is also adopted here.

Analytical Framework

A modern articulation of past urban development theories can be found in Scott and Storper (2014), which explains that the urbanization process is characterized by the spatial concentration of production activities and clustering and sorting in other human activities. An examination of the historical origins of cities would show that the ways in which these activities

in the cities are condensed or polarized can be generalized in what can be called the “urban land nexus” or interacting sets of land uses (Figure 1). The study broadly categorizes the divisions of this urban land nexus into three: the production space of the city where work and employment are concentrated, the social space of the city as manifested in residential neighborhoods, and the circulation space of the city as represented by the infrastructures and arterial connections that facilitate intra-urban flows of goods, people and information. The circulation space also allows the smooth interaction of the production space and social space.

Figure 1. Urban land nexus



As a corollary to the urban land nexus proposition, Scott and Storper (2014) explains that extensive common pool assets and liabilities exist in such nexus. Moreover, in the absence of effective institutions of collective coordination, these common pool assets and liabilities would

be subject to numerous kinds of dysfunctionalities such as infrastructure breakdowns, land use conflicts, deteriorating neighborhoods and environmental pollution.

In anticipating urban growth and urban sprawl, therefore, the allotment of land, buildup of infrastructure, establishment of governing institutions, and provision of funds that will make such nexus effective and efficient should be planned for. In the same vein, making such nexus work should be planned for when addressing urban congestion and proliferation of slums.

Definitions and urban population trends

In the Philippines, the level of urbanization is being reckoned based on an administrative definition of an urban area. A *barangay* (i.e., the smallest administrative division in the country and the Filipino term for “village”) can be classified as urban if it meets any of the following three criteria: (a) if its population has grown to 5,000 inhabitants or more; (b) if it has at least one establishment with a minimum of 100 employees; or (c) if it has five or more establishments with ten to 99 employees and five or more facilities within the two-kilometer radius from the barangay hall. Any barangay which does not satisfy any of these criteria is considered a rural barangay. Under the third criteria, “facilities” could mean any of the following: town/city hall or province capitol; church, chapel or mosque with religious service at least once a month; public plaza, park or cemetery; market place or building where trading activities are carried out at least once a week; public building like school (elementary, high school, or college), hospital, puericulture center, health center, or library; landline telephone system, calling station or cellular phone signal; postal service or public fire-protection service; community waterworks system or public-street sweeper; and seaport that is operational (Philippine Statistics Authority 2013).

As of 2010 nationwide census, the level of urbanization, or the proportion of urban population to the total population, in the Philippines was 45.3 percent. This means that of the 92.3 million Filipinos in 2010, 41.9 million lived in areas classified as urban (Table 1). The Commission on Population estimated that the country's population hit 100 million on July 27, 2014 and declared the birth of a Filipino baby at 12:35 A.M. the symbolic 100 millionth-mark.

Table 1. Level of urbanization in the Philippines, 2010

	Population	Level of urbanization (%)
Philippines	92,337,852	45.3
National Capital Region	11,855,975	100
Cordillera Administrative Region	1,616,867	26.3
I Ilocos	4,748,372	12.7
II Cagayan Valley	3,229,163	11.6
III Central Luzon	10,137,737	51.6
IV-A CALABARZON	12,609,803	59.7
IV-B MIMAROPA	2,744,671	22.3
V Bicol Region	5,420,411	15.3
VI Western Visayas	7,102,438	34.7
VII Central Visayas	6,800,180	43.7
VIII Eastern Visayas	4,101,322	8.7
IX Zamboanga Peninsula	3,407,353	33.9
X Northern Mindanao	4,297,323	41.3
XI Davao Region	4,468,563	59.3
XII SOCCSKSARGEN	4,109,571	46.5

	Population	Level of urbanization (%)
XIII Caraga	2,429,224	27.5
Autonomous Region in Muslim Mindanao	3,256,140	13.7

Notes:

The 2010 total population includes 2,739 Filipinos in Philippine embassies/consulates and missions abroad as of May 1, 2010.

CALABARZON – Cavite, Laguna, Batangas, Rizal and Quezon provinces.

MIMAROPA – Oriental Mindoro, Occidental Mindoro, Marinduque, Romblon, and Palawan provinces.

SOCCKSARGEN – Provinces of South Cotabato, Cotabato, Sultan Kudarat and Sarangani, and city of General Santos.

Source: Philippine Statistics Authority

The National Capital Region or Metro Manila is already 100 percent urban. It is the seat of government and the most populous region and metropolitan area of the country. It is composed of sixteen cities (Caloocan, Las Piñas, Makati, Malabon, Mandaluyong, Manila, Marikina, Muntinlupa, Navotas, Parañaque, Pasay, Pasig, Quezon City, San Juan, Taguig, and Valenzuela) and one municipality (Pateros). As of 2010 census, its population was 11,855,975 and population density was 19,137 persons per square kilometer. Regions adjacent to Metro Manila have high levels of urbanization. For example, Region III in the north had 51.6 percent urban population in 2010 and Region IV-A in the south had 59.7 percent urban population. In southern Philippines, Region XI, where Metro Davao is located, has a relatively high level of urbanization, with 59.3 percent urban population in 2010.

Based on projections by the United Nations (UN), Philippine urbanization in 2030 and 2050 will be close to the overall rates in the Southeast Asia region (with Southeast Asia defined by the UN as the ASEAN members plus Timor-Leste). By 2030, the projections are that 56.3 percent of the population in the Philippines will be urban and 55.7 percent in the whole Southeast Asia, and by 2050, 65.6 percent in the Philippines and 65.9 percent in Southeast Asia. Table 2 shows the projections for the ASEAN Plus Three countries and Timor-Leste.

Table 2. Projected urbanization levels in ASEAN Plus Three Countries and Timor-Leste

	Percentage of population in urban areas		
	2010	2030	2050
Southeast Asia, overall	44.1	55.7	65.9
Brunei Darussalam	75.6	81.6	85.9
Cambodia	19.8	26	37.6
Indonesia	49.9	63.1	72.1
Lao People's Democratic Republic	33.1	51.5	64.6
Malaysia	72	81.1	86
Myanmar	32.1	44.1	56.8
Philippines	48.6	56.3	65.6
Singapore	100	100	100
Thailand	33.7	43.7	55.7
Timor-Leste	28	35.8	44.2

	Percentage of population in urban areas		
	2010	2030	2050
Viet Nam	30.4	43.3	55.9
“Plus Three” Countries			
China	49.2	68.7	77.3
China, Hong Kong SAR	100	100	100
China, Macao SAR	100	100	100
Japan	90.5	96.8	97.6
Republic of Korea	82.9	87.1	89.6

Notes:

The 2010 figure for the Philippines in the above table is a projected level and differs from the actual census data because the official results of Philippine census was not yet available when the UN material was being prepared.

SAR – Special Administrative Region

Source: United Nations. 2012. *World Urbanization Prospects: The 2011 Revision*.

Phases of urban development in the Philippines

Pre-Spanish growth of settlements and the city-citadel concept during the Spanish occupation

The phases of urbanization in the Philippines can be put into context by characterizing first the native settlements before the Spanish colonizers came. Recent archaeological finds have revised local and foreign notions on the level of literacy and culture of pre-Hispanic settlements in the Philippines. The Laguna Copperplate Inscription, a certificate of debt

forgiveness granted by the chief of Tundon (or Tondo in present-day Manila) and by certain authorities in Luzon, revealed well-organized settlements, which were literate, cultured, had forms of government and had pre-existing customary laws in AD 900, many centuries before Ferdinand Magellan's discovery of the islands in 1521 (Postma 1992). By the time the Spaniards were preparing for the 1571 conquest of Luzon starting with Manila, the thriving community of Manila was estimated to be large—consisting of about 4,000 inhabitants (Guariña 2007). The rest of the story is a standard narrative of how the *conquistadores* won and subdued the natives of the Philippine islands. Economic activities especially relating to the galleon trade and shipbuilding sustained the growth of settlements in the Philippine islands (Hart 2002) and laid the foundations of early urban settlements. The seat of the Spanish colonial government then became ensconced within the stone walls of Intramuros, the historic core of the present-day Manila.

Many Filipino urban planning practitioners, architects and engineers place the earliest evidence of urban planning to the time when the American colonial government laid out the so-called Burnham Plans for Manila and Baguio in 1905. But a careful reading of history points to the fact that even before that, an equivalent of urban planning had long been practiced in the Philippines using the city-citadel concept, where defense plans were prominent, and this is evident in present-day Intramuros and cities which feature forts (such as Zamboanga City with its Fort Pilar and Cebu City with its Fort San Pedro). Moreover, old drawings of plans for Philippine cities show a Spanish-era planning of space with parallel and perpendicular straight streets for horse-drawn vehicle and foot traffic. The streets cross each other to form a gridiron (a type of city plan in which streets are perpendicular to each other and form a grid), with a core square or rectangle forming a central plaza that houses the cathedral and the municipal hall or city hall. In many parts of the country, this type of urban space organization can still be found.

Urban sprawl was already being experienced in Manila in the 1880s and a sort of mass transport system that would also serve areas outside Intramuros was deemed needed. Thus, in 1882, investments for the first mass transport system for an urban area in the Philippines began with the founding of the *La Compania de Tranvias de Filipinas*. Between 1885 and 1889, the company constructed a network of five lines of *tranvia* (streetcars or omnibuses), with a central station outside the walls of Intramuros. *Tranvias* in four of the lines were horse-drawn and one line ran on steam (Satre 1998).

Urban development during the American occupation

After the 1896-1898 Philippine Revolution cut the more than three century-old rule of Spain over the islands and the nascent Philippine Republic found itself routed in 1902 by a new colonizer, that is, the United States, rebuilding and new developments began. In 1905, under the commission of the colonial government of the United States of America, the architect Daniel Burnham drew plans for the improvements of the city of Manila and a new plan for what will be the city of Baguio (Burnham 1905), although the plan for Baguio was tentative in character due to inadequate surveys. The Burnham Plan for Manila outlined a circumferential-radial road system. The proposal also recommended mixed-use space and explained the functions of tree lined streets, parks, waterways and waterfront. The idea is for every resident to be a short walking distance from a park, places of work, and leisure areas.

Innovations enabled by electricity in the modern world, such as the electric trolley, reached the Philippines when a concession for building electric power and transportation networks in Manila was awarded in 1903 to the Manila Electric Railroad and Light Company (the present-day Meralco). By 1913, nine lines of electric trolleys, which were still called *tranvia* by

commuters, were operating (Satre 1998). In the 1930s, as the circumferential-radial road network improved, electric- and gasoline-powered bus services were introduced.

But the adherence to the Burnham Plan in the development and management of urban Manila and the further development of the *tranvia* network were cut short by the war. Manila was the second most devastated city in the world, next to Warsaw in Poland, when World War II ended in 1945.

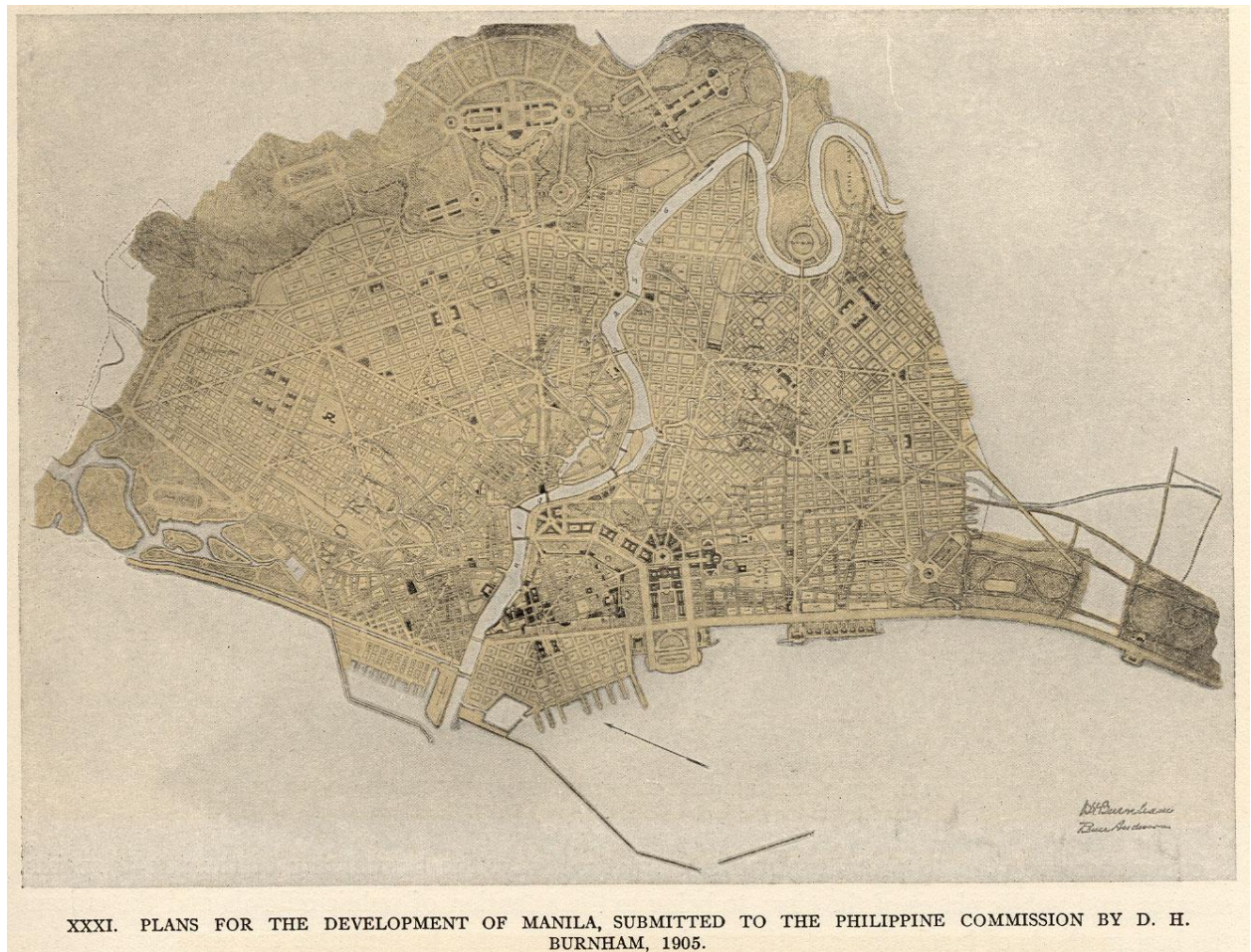


Figure 2. The Burnham Plan

Note: The north is toward the left side of the map.

Source: public domain, original scanned from Burnham, Daniel H., and Edward H. Bennett, Plan of Chicago, the Commercial Club, Chicago MCMIX 1909.

Post-World War II reconstruction up to present

To promote economic recovery, rebuilding had to be done in haste after the war, and more so after the Philippines gained independence from American occupation in 1946. The government's responsibilities were roads, sewerage, water supply, and security. Housing was a task left to the private sector and the government's approach to real estate development was to "let the private sector roam freely" (Camba 2011). The National Urban Planning Commission (NUPC) was created in 1946 to assist in rebuilding Philippine cities destroyed during the war (SURP 2014). The NUPC recommended zoning ordinances and drew up city plans, but it turned out to be an ineffective body because its recommendations and regulations could be overturned by the more powerful local governments (Camba 2011).

Urban mass transport infrastructure development also stopped as World War II put the *tranvia* out of business. When the war ended, the need to restore electricity in the city became the more pressing concern of Meralco and moving people around became the business of ingenious Filipinos who transformed numerous army jeeps into four- to six-seater jitneys (called *jeepneys* in the Philippines).

Through the years and after the enactment of the Local Government Autonomy Act of 1959, the functions of the NUPC were devolved to local governments and the NUPC played the role of advisor. Symptoms of non-readiness of local leaders in urban development planning and implementation then emerged. These were evident in the multiplication of informal settlers, residential lot developments being sold without roads and utilities, "ribbon development" or

proliferation of residential and commercial structures along highways, and roads congested with vehicular traffic.

The practice of not following through the comprehensive urban development plans that were drawn many years before (such as the Burnham Plan) had also taken root, but this time without the justifiable excuse rendered by war. For instance, the 1941 Harry Frost-Juan Arellano master plan to make Quezon City the new capital, replacing Manila, was revived after the war. The plans were revised twice, in 1949 and 1956, and the government started expropriating and purchasing lands for government offices and public housing. National government offices were also gradually built in Quezon City. But when the former dictator, Ferdinand Marcos, announced that Metro Manila would be the national capital of the country, the Frost-Arellano Plan was deserted. With the desertion of this plan, infrastructure and housing plans were also deserted, except for a few projects like Quezon City Housing Projects 1 to 8 and other housing schemes for teachers and government employees (Camba 2011). Nevertheless, Marcos' consolidation of Manila and 16 other cities and municipalities into one metropolitan region gave birth to the Metropolitan Manila Commission in 1975, which re-introduced the use of strategic urban planning. The Metropolitan Manila Commission came up with a Structure Plan which defined a framework for growth of Manila through a spatial arrangement of functional areas, land use planning, infrastructure developments, and population distribution. Convention and cultural centers, international hotels, the Manila South and North Expressways, and the Light Rail Transit System are products of the Structure Plan for Manila. However, the implementation of the Structure Plan was riddled with corruption as funds for public service were channeled to Marcos' cronies who received kickbacks; eventually, many of the projects had to be put aside (Ballesteros 2000).

National government agencies meant to formulate urban development plans and enforce land use control, zoning regulations, and land conversion rules, were set up but through the years, these evolved into agencies that did less planning and did more permitting and licensing activities. As the enactment of laws (e.g., Presidential Decree or PD 933 in 1976, PD 1396 in 1978, and Urban Development and Housing Act in 1992) and creation of government agencies (e.g., Ministry of Human Settlements, Human Settlements Regulatory Commission, Housing and Urban Development Coordinating Council, and Housing and Land Use Regulatory Board) emphasized housing, the coverage of the medium-term plans and urban development thinking naturally gravitated toward solving the housing problem. There is nothing wrong in dealing with the housing issue, but planners should not have missed the component wherein they are supposed to craft strategic urban development plans with actual physical targets and that take into consideration circulation space, physical infrastructure, and connectivity or mobility in ever expanding urban areas. This should have involved a closer coordination with public works and infrastructure agencies that have also evolved through the years.

In areas of the country outside Metro Manila, it has also been common to see medium-plans not being followed through, especially when a new mayor or governor wins in the election and discards the former local chief executive's plans. In local governments, planning is narrowly focused on piecemeal zoning and land use conversion, and local government efforts are being spent largely on permitting and licensing activities and less on strategic urban planning that could have respected the urban land nexus—that is, providing strategic plans for enhancing the link within and between production space and social space through the circulation space (including physical infrastructure). A local government unit is required under the law to come up with a Comprehensive Land Use Plan (CLUP) but the CLUPs of local governments are almost like mirror images of one another in that plans related to zoning and residential/commercial area development are dominant while plans related to strategic connectivity-enhancing infrastructure

are few and unclear, if not entirely missing. In the articulation of CLUPs in adjacent local government units, it is also common to find that these are not framed by an overarching long-term vision and cohesive strategies for interconnectivity at the higher geographical level (i.e., provincial, regional, island or inter-island levels). Thus, the CLUPs are often inward-looking, fragmented and lacking in complementarity.

Current challenges and the government's response

Philippine cities are growth centers since incomes in urban areas are 2.3 times that in rural areas, according to estimates in 2009 (HUDCC and PIDS 2009). The Asian Development Bank (2012) also reckons that urban areas in the Philippines have been accounting for 75 to 80 percent of the country's gross domestic product (GDP) since 2000, with Metro Manila alone contributing nearly a third of total GDP.¹ Moreover, poverty incidence was lowest in the most urbanized Metro Manila (2.6% poverty incidence in 2012) and to some extent, the regions surrounding Metro Manila. But a very large segment of the urban population is just above the poverty line and extremely vulnerable to slipping back into poverty. Housing problem is also very serious as evidenced by slums and squatter settlements. Traffic congestion and the high cost of moving people and commodities are also very critical problems. Given the archipelagic nature of the country, proliferation of urban settlements is usually concentrated along the coast, exposing the urban population to climate change-related risks.

In the assessment by the Asian Development Bank (2012), the urban sector's economic growth is seen as being limited by: inadequate infrastructure to attract investment, lack of

¹ In 2013, the nominal GDP of the Philippines was US\$272.018 billion and nominal GDP per capita was US\$2,790.

incentives to promote growth in regional centers, weak capacity for local development planning and implementation, uncoordinated government response, and unpreparedness of local government units for natural disasters and climate change. Moreover, there are key problems in economic and environmental infrastructure. These are:

- **Acute shortage of potable water.** It is estimated that less than 50% of the urban population have access to piped water or individual household connections, making waterborne diseases a major public health concern.
- **Inadequate sanitation coverage and poor services.** Communal sewer systems are usually absent in urban areas, storm-water drains are often used for wastewater disposal, there is little or no treatment in existing septage collection systems, and investment on proper wastewater treatment is seldom undertaken.
- **Frequent flooding and rising flood damage.** Flooding is a recurring problem and is aggravated by uncontrolled building, informal settlements, lack of appropriate building codes and enforcement of regulations, encroachments onto river rights-of-way, indiscriminate dumping of solid waste, sedimentation, and the lack of maintenance of watercourses.
- **Poor solid waste disposal.** About two-thirds of existing disposal sites are open dumps and indiscriminate dumping of solid waste onto open areas and watercourses occur.
- **Inefficient urban transport.** In most Philippine towns and cities, road networks are poor. Moreover, traffic control devices, such as traffic signs, signals, and road markings,

often do not conform to official standards or meet needs. Mass rail transport system is available only in Metro Manila and there have been no additional lines after the operation of Line 2 in 2003.

The current medium-term framework for addressing urban development challenges is contained in the National Urban Development and Housing Framework (NUDHF) 2009-2016. It was formulated in 2009 by the Housing and Urban Development Coordinating Council in partnership with the Philippine Institute for Development Studies. The NUDHF 2009-2016 aims to facilitate economic growth, develop and strengthen local comparative advantages, and significantly improve the quality of life in Philippine urban areas. It formulated recommendations aligned with five elements of the framework, namely:

- (1) **Urban competitiveness.** This is to be promoted through such strategies as increasing the productivity and efficiency of urban industrial regions, building on existing strengths of manufacturing and producer services, and focusing on export-oriented activities in globally competitive, core export areas (e.g., greater Metro Manila, Cebu, and Davao City).
- (2) **Poverty reduction.** This is to be achieved by: enhancing rural–urban linkages to improve labor mobility and connectivity among rural producers and urban consumers; managing population growth by encouraging smaller families; and implementing livelihood, entrepreneurial, and human resource programs aimed at poverty alleviation.
- (3) **Housing affordability and delivery.** This is to be pursued by linking development plans with local economic investment programs, unlocking land for affordable housing,

increasing funding of proven programs and institutions, and streamlining housing development transaction processes.

(4) **Sustainable communities.** This is to be promoted by using market-based incentives and disincentives to ensure that public amenities support urban land-use objectives, encouraging sustainable planning and green building, and integrating climate change adaptation and disaster risk management into community and regional development.

(5) **Performance-oriented governance.** This is to be implemented by: providing incentives for local government units to become less dependent on the internal revenue allotment; strengthening their capacity for strategic planning, investment programming, budgeting, and implementation; improving vertical coordination; increasing transparency and accountability; supporting public-private partnerships; encouraging performance-based local governance; and supporting metro (interlocal) jurisdictional cooperation.

The NUDHF 2009-2016 explained the infrastructure component but it is a mere listing and description of projects and there is no articulation of purpose-driven and deliberate facilitation of goods and people mobility through strategic transport. It also did not articulate how urban development and growth corridors can be shaped by strategic infrastructure investments.

Increasing urbanization in the Philippines will involve major adjustments in housing and employment provision, consumption patterns, and social interactions. If we are to look at history, there are evidences of urban development planning with a physical infrastructure focus, yet the urban development plans of today, in Metro Manila and other cities, seem to forget the infrastructure focus and the need to facilitate the circulation of people within and between the production spaces and social spaces. What is needed, aside from urban development

frameworks, are actual physical plans or master plans that, among others, safeguard land for utilities and infrastructure decades ahead, deliberately configures transport networks (including strategic seaports, controlled expressways and, if needed, railway extension to suburbs) to induce factor mobility, and actively aims for removal of slums and renewal after removal. However, it appears that at the national level, the Philippines' medium-term urban development plans have been overly focused on housing, and at the local government level, the so-called Comprehensive Land Use Plans have been overly emphasizing land use conversions and zoning and do not have deliberate and operational plans framed by an overarching long-term vision of an interconnected archipelago.

In Metro Manila, there is a transport plan aiming to decongest the metropolis and which could have been a component of an overall urban development plan. This is the Metro Manila Urban Transportation Integrated Study and is currently being updated. There is also the recent Flood Management Plan for Metro Manila and Surrounding Areas. What seems to have been missed in the past decades is a master plan where key components could have included: efficiently moving people and goods via strategic transport infrastructure, requiring mixed-use plans in compact community developments to allow smart growth and liveability, enforcing slum clearance and urban renewal at the local government level, and putting in place flood management strategies that also control growth in flood-prone areas. The emphasis in planning should have been long term and not medium term that can be easily supplanted after a change in political leadership.

Recently, the Japan International Cooperation Agency (JICA) crafted a "Dream Plan" for Metro Manila and neighboring Central Luzon (Region III) and Southern Tagalog (Region IV-A), a big conglomeration of urban areas that JICA calls the Greater Capital Region. The plan up to 2030 will cost US\$57 billion and proposes short-term projects aimed to decongest Metro Manila,

and medium- to long-term strategic infrastructure projects aimed to enhance connectivity with adjoining regions. The connectivity-enhancing projects include the development of the North-South Commuter Rail system, the construction of the Mega-Manila Subway, the redevelopment of Subic and Batangas ports and control of the expansion of Manila ports, and the development of the Clark Airport and a new airport for Metro Manila to serve as main gateways to the country. There are no clear directions yet on whether or not the plan will be adopted as the details are still currently being deliberated by government officials.²

Possible role of regional cooperation among ASEAN Plus Three countries

Given the pattern of urbanization in the Philippines and the constraints that the country faces in harnessing urban development in order to promote economic growth and higher standard of living, it appears that exchange of best practices and financing opportunities are possible areas for ASEAN Plus Three regional cooperation. Best practices sharing and financing efforts would be crucial in addressing the emerging concerns on physical infrastructure in Philippine urban areas. The country also needs to have solid information on alternatives to its current institutional setup, including incentives design for planning and implementing government units, and must be able to elicit discussions of best country practices through regional cooperation.

Urbanization is a major driver of infrastructure investments. But strategic infrastructure investments can also drive the direction of urbanization, specifically the direction of urban sprawl and the demand for basic services that goes along with it. The Philippines needs to

² The details are not yet available and what are currently in the public domain are video and powerpoint presentations.

assess the consequences of urban sprawl and further motorization that goes with it, which in turn leads to higher energy consumption, and pollution. The knowledge of different country experiences on motorization, and mass transit (e.g., rail or bus rapid transit systems) as an alternative to it, will be very useful for the Philippines.

The rise in urbanization requires strategic investments in mass transport, highways, bridges, ports, airports, water distribution networks, electric power systems, and telecommunications and information infrastructure. The Philippines is targeting to spend 5 percent of GDP annually for all these infrastructure sectors but so far it is nowhere near this target as public infrastructure spending as a share of GDP ranged between a low of 1.40 percent to a high of 2.09 percent in 2008-2012 (Navarro and Llanto 2013).

In previous years, the major constraint to meeting the target is resource availability but now that the Philippines is experiencing wider fiscal space, more public resources are being made available for infrastructure investments. At present, it appears that the more serious short-term constraints are the weak capacity of government implementing agencies to absorb more funds and implement projects. Regional cooperation may be able to contribute to addressing the short-term problem on absorptive capacity of government agencies. Addressing this may require sharing of best practices and innovations in procurement, contractual arrangements, project management, and project implementation. It may also require partnerships in dynamic capacity building for government personnel and managers. In the longer term, regional cooperation may be needed in mobilizing financial resources that could sustain the target infrastructure investment-GDP ratio.

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