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Günter Spreitzhofer

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Worldwide urbanization is considered one of the most outstanding phenomena of the twenty-first century. According to UN estimates, the urban population will have outnumbered the rural population within the next two decades (United Nations 1992). The megacities especially in Third World countries are experiencing the dynamics of rapid urban development, which are based on both external and internal aspects of socioeconomic and ecological change. Throughout Southeast Asia, mega-urban regions have come to fulfill the function of hubs of international investment, socioeconomic transformation and political showcase, which may be judged as a combination of global impact (external reasons) and regional input (internal reasons).

This article attempts an analysis of current demographic and socioeconomic trends in Metro Manila, the Philippine National Capital Region (NCR), which has been dominating both regional politics and economics for centuries. Manila is considered the city experiencing the world's longest colonial influence: having developed from a few buildings around Intramuros Castle at the Pasig River into the capital of a Spanish colony (1521–1898) and, subsequently, becoming a US dominion from 1898 to 1946, the primacy of the city was already obvious a century ago. The first Philippine census ever, carried out by the US government in 1903, showed that 40 percent of all industries, 66 percent of all medical facilities and hospitals, 80 percent of all banks and 90 percent of all newspapers were located in the booming port city at the Manila Bay (Bronger and Engelbrecht 1997, 39). Things haven't changed much after independence. In 1995, Manila featured 68 percent of all Philippine telephone connections (Cuervo and Kim Hin 1998, 251) and 90 percent of the major economic enterprises; additionally, 90 percent of the total national taxes were derived from the capital region (National Statistics Office 1996).

Undoubtedly, Metro Manila continues to play a key role for international investment on the one hand and contributes to increasing underdevelopment in the rural areas of the archipelago on the other. The shift between rich and poor is on the rise, both on a national level and within the agglomeration itself, which is characteristic of megacity development in Southeast Asia in general (Husa and Wohlschlägl 1999; McGee and Robinson 1995; Spreitzhofer and Heintel 2000): "a parasitic city . . . growing and expanding because of the tributes from the rest of the country," as Laquian (1966, 30) stated more than three decades ago.

Although Metro Manila still is not as integrated into global trade and trends as similar agglomerations such as Bangkok, Jakarta or Kuala Lumpur, its demographic, economic and ecological development definitely reflects the ups and downs of national political turmoil as well as international crisis. In the course of the following discussion special focus will be put on reasons, size and prospects of the regional urbanization trends and their consequences for future land use and infrastructure needs in the Philippine National Capital Region, where neocolonial hierarchies and postfeudal traditions seem to counterbalance sustainable development approaches.

The Urbanization of the Philippine Archipelago

Four times as populous as the next three cities combined . . . Metro Manila continued to manifest many of the typical characteristics of a Third World primate city, and thus to overshadow other urban centres in the Philippines. (Hedman 1999, 189).

The Manila region has always been a melting pot of Chinese, Indian and Arab merchants, who used the city's fine location at the Manila Bay for substantial international trading connections. The comparatively high level of urbanization a century ago (1903: 13.1 percent) is generally regarded as a combination of historical and colonial factors (Cuervo and Kim Hin 1998, 249).

- Spanish missionary work caused the migration of indigenous peoples to bigger settlement units.
- Increasing guerrilla activities at the end of the Spanish colonial period (1521–1898) promoted the migration to cities.
- The first US military strongholds provided attractive employment opportunities in the early twentieth century.

After a slight decrease of the national level of urbanization to 12.6 percent (1918) due to effective land reforms, the number of urban Filipinos continued to rise to 21.6 percent in 1939. This was partly favored by the spread of US-financed education facilities around Manila. Additionally, the so-called "American policy of Filipinization" gave the native population the opportunity of direct employment and participation in economic and political decision-making, which had been unthinkable during the Spanish-dominated centuries. Between 1918 and 1939 the number of industrial enterprises increased seventeen fold (Pernia 1976, 7).

Due to the effects of World War II which destroyed big parts of Metro Manila, the national urbanization level remained stable at around 27 percent until 1947 (Solon 1996). The postwar period was characterized by reconstruction efforts of the national capital: "Manila demonstrated various features of urban bias by providing the reputable universities, health care and medical facilities, a large protected industrial base, the financial/trade services, foreign exchange and political power" (Cuervo and Kim Hin 1998, 250).

Table 1: The Distribution of Urban and Rural Population in the Philippines (1903–1990)

Census (Year)	Total Population (in Million)	Level of Urbanization (in %)	Urban Pop. (in Million)	Rural Pop. (in Million)
1903	7.6	13.1	1.0	6.6
1918	10.3	12.6	1.3	9.0
1939	16.0	21.2	3.4	12.6
1948	19.2	27.0	5.2	14.0
1960	21.1	29.8	8.1	19.0
1970	36.6	32.8	12.0	24.6
1975	42.0	33.3	14.0	28.0
1980	48.2	37.3	18.0	30.2
1990	60.7	48.8	29.6	31.1

Source: Cuervo and Kim Hin 1998, 247

The share of a region's urban area largely depends on the region's level of socio-economic transformation, which itself influences the distribution of national poverty. Urbanization phenomena entail a reduction of rural areas and potential increases of household income, thus

facilitating migration decisions and offering a strong impetus for further urbanization. Consequently, the Philippine urban population grew from 30 percent (1960) to 49 percent (1990) at an average annual increase of 4.43 percent; Metro Manila is home to 27 percent of the Philippine total urban population (Sobrepeña 1994, 1).

Table 2: The Regional Population Growth (1975–1995)

	Population (in Million)				Annual Increase (in %)		
	1975	1980	1990	1995	1975–80	1980–90	1990–95
NCR	4.97	5.93	7.98	9.45	3.58	2.98	3.30
Philippines	42.01	48.01	60.71	68.62	2.71	2.35	2.32

Source: National Statistics Office 1997a: 320

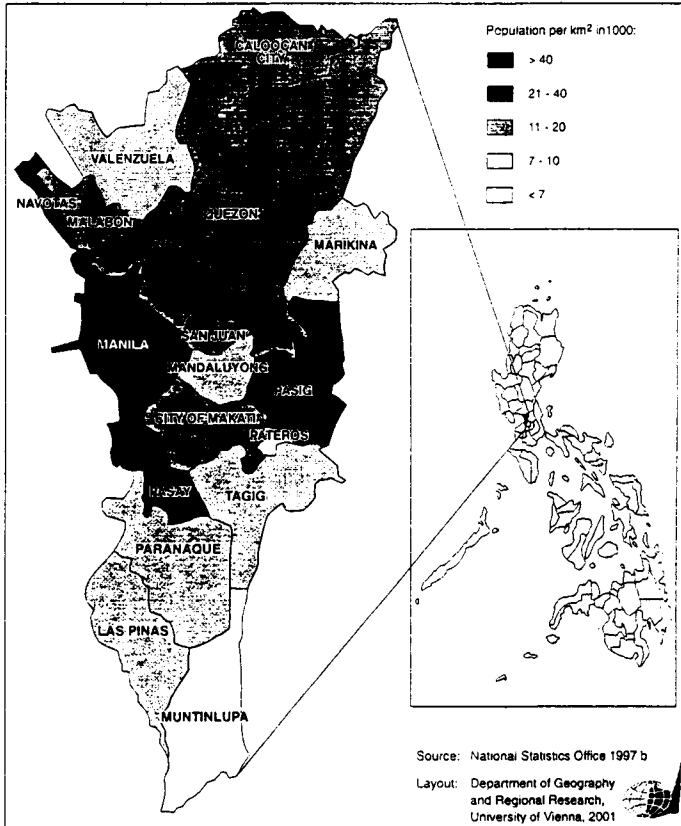
The Philippine National Capital Region: Traditions and Trends

The Philippine National Capital Region (NCR) has been a statistical planning unit since November 1975 (Presidential Decree 824).¹ It was modelled by the National Urban Planning Commission which was founded after the declaration of independence as the central planning department in order to cope with the disastrous effects of World War II. According to definition, the NCR at present consists of ten neighboring cities and seven municipalities located on 636 km² along the mouth of the Pasig River into the Manila Bay.² The average population density amounts to 14.865 per km² in 1995, compared to 12.498 (1990), 9.317 (1980) and 6.237 (1970) (National Statistical Coordination Board 1999). The core agglomeration extends twenty kilometers inland and seems to follow a growth pattern along main artery roads (Oreta 1996, 154f).

With an official NCR population of 9.45 million people (census 1995) 13.8 percent of the Philippine total population are living in the capital region, most of them migrants from rural parts of the archipelago.³ The annual population growth of 3.58 percent (1975–1980) seemed to have slowed down in the past decade (+2.98 percent, 1980–1990). However, from 1990 to 1995 the population increase amounted to 1.51 million people (+18.9 percent), which means an annual growth of 3.3 percent.

The population of the NCR is basically young (average age: 22.9 years), mostly single (46.1 percent) and will have doubled in the next

Chart 1: The population density within the NCR (1995)



two decades (National Statistics Office 1997b), provided the present social and political background remains unchanged. However, under closer consideration the persistent population boom of the 1990s turns out to be quite diverse for various parts of the NCR. Whereas the population increase in core districts of the NCR is low at 2 percent (Makati, Manila, Pasay, Pateros) or even negative (-0.4 percent, San Juan), the population growth is highest in the northern (5.6 percent, Caloocan City) and southeastern fringe zones of the region (7 percent, Muntinlupa; 6.9 percent, Taguig).

Despite a high level of education (compared to national standards), the qualification standards of potential employees and workers is generally considered low. Only 12.3 percent of Metro Manila's work force consists of skilled workers, every fifth of them being a driver or mechanical engineer. The sex ratio in 1990 (94.2 men against 100 women) shows the disproportionate dominance of female workers, who seem to constitute the bigger part of rural in-migrants (National Statistics Office 1997b).

The primacy of the NCR is both due to historical development and socio-economic factors which have rendered Metro Manila the dominant center of politics, trade and industry. With average wages seven times higher than in the poorer regions of the Philippines, the NCR produces a full third of the national GDP (EIU 1999, 19) and lures migrants from all over the archipelago.

Urban Poverty: A Megacity Phenomenon?

Poverty in the Philippines is not primarily urban in its features, although the urbanization of poverty can no longer be neglected. Regardless of the statistical indicators used, poverty remained high in the seventies, despite a dramatic increase of the country's GDP. Whereas urban poverty rose to 39 percent (1965–1971), rural poverty peaked at 59 percent, seemingly due to the concentration of early economic power in urban areas. Statistically speaking, Metro Manila is home to 28 percent of the country's total urban population but only to 15 percent of the total urban poor (Berner 1997).

The Southeast Asian economic crisis has not hit the Philippines as badly as other ASEAN nations such as Thailand or Indonesia which are much strongly integrated into global trade schemes (Cibulka 1999, 117). Nevertheless, the consequences of the ASEAN breakdown of the late 1990s have sharpened the disparities between rich and poor with average incomes decreasing rapidly (Cf. Estudillo and Otsuka 1999; Hayami et al. 1998). From 1994 to 1998, the number of people living below the poverty line rose to 4.55 million, which, however, is still comparatively low by Southeast Asian standards (Cf. Balisacan 1994, 117; Haddad et al. 1999; Philippine Development 11-12/1998, 15ff). In 1997, the richest 10 percent of the Philippine population

- Were twenty-four times richer than the poorest 10 percent of the population (1994: 19 times).
- Were able to consume ten times more proteins.

- Spent eighteen times more for clothing, eleven times more for water and petrol, and ninety-six times more for education (Human Development Report of the United Nations Development Programme 1998).

The National Anti-Poverty Commission (NAPC), whose goal is both social reform and institutionalized poverty reduction, aims at higher funds and logistic improvements (Cousart 1999, 79ff). However, the attempt to put into action the "Social Reform Agenda" (SRA), which aimed at reducing the number of poor people to 30 percent of the total population until 2000, was bound to fail owing to political and social turmoil.

The Infrastructure of the NCR

Infrastructure projects, beautification drives, and aesthetics have become a prime concern in metropolitan development schemes. Multi-lane free-ways . . . and similar showcases have often been pursued at the expense of squatters, slum dwellers, informal sector workers, and beggars. (Rüland 1996, 13)

Despite a number of politically motivated measures aiming at a drastic improvement of living conditions in urban areas, many basic infrastructure facilities still fail to meet the requirements of a twenty-first century metropolis. International debts on the one hand plus constant urgent aid measures for rural areas hit by floods, volcano eruptions and thunderstorms, have prevented sustainable and up-to-date infrastructure development. Additionally, the drastic population increase, obscure public construction activities, corruption and the ASEAN crisis of 1997 did not contribute to an improvement of the largely insufficient infrastructure.

Whereas from 1979 to 1983 around 5 percent of the GNP were spent on infrastructure development, this share dropped to less than 2 percent in the mid-nineties. Power generation facilities, for example, increased less than 50 percent between 1980 and 1990, compared to a six fold increase in Indonesia. Similar trends are obvious for telecommunication and road construction. Whereas in Thailand and Indonesia the number of roads almost doubled in that decade, the Philippines even had to face a decrease of roads (Frehner and Meyer 1999, 27ff). Until 1992 daily power outages of ten hours or more were common, as were significant delays in telephone installations and connections.

International competition and privatization activities began only during the presidencies of Corazon Aquino (1986–1992) and Fidel

Ramos (1992–1998), when the monopolies in power generation and telecommunication were abolished and the budget deficit was transformed into a surplus. Between 1985 and 1996 the number of telephone connections quadrupled to 4.1 per 100 persons (EIU 1999, 17), with 45 percent of all Philippine telephone connections being located in the NCR in 1998 (National Statistical Coordination Board 1999).

Subsequently, some current aspects of Metro Manila's infrastructure development will be highlighted, which seem to be bound to prevent both future international investment and a sustainable reduction of innercity disparities.

Focus 1: City Transport

In 1998, 40 percent (1.10 million) of all Philippine vehicles were roaming across Metro Manila constituting an increase of 56 percent from 1990 (National Statistical Coordination Board 1999). This implies that the majority of all traffic movements takes place on only 2 percent (4.820 km) of the national road network. An estimated twenty million people are transported everyday, about 70 percent by public buses and jeepneys, and only 30 percent by private vehicles. The latter, however, amount to 75 percent of all registered Philippine vehicles.

The NCR's public road network is privately organized and generally considered notoriously inefficient. Buses are restricted to the main artery roads, whereas short distances are covered by jeepneys and tricycles which have to connect the bus routes with the various terminals scattered throughout the NCR. The state-owned LRT (light rail transit) which until the late 1990s only served a 12 km north-south link within the NCR despite a daily 400,000 passenger capacity is a key traffic infrastructure.

The average speed within the NCR is less than 12 km/h (Frehner and Meyer 1999, 31). This is basically due to the uncoordinated construction of bus terminals throughout the region, corrupt licensing of tricycles and unlimited access of all kinds of vehicles (Oreta 1996, 162ff). Undoubtedly, the regular breakdown of all kinds of urban transport constitutes a major threat to the people's health as well as a disincentive to potential investors.

Focus 2: Water and Air

The environmental problems of Asian megacities relating to severe depletion of water resources and serious pollution of land, water and air

are well-documented . . . with a lower level of sewerage (maintenance) and substantial discharge directly to surface drains or into deep pits, the situation is becoming potentially epidemic. (Asian Development Bank 1997)

Air pollution within the NCR is three times higher than the standards set by the WHO making the region among the worst places on the planet as far as air quality is concerned. Sixty percent of the noxious emissions are due to urban transport, whereas 40 percent are ascribed to industrial pollution (Oreta 1996, 161f). The costs of urban air pollution within Metro Manila are estimated to amount to 5 percent of the GNP, similar to Jakarta or Bangkok (Asian Development Bank 1997).

The NCR's water supply is as disputed as in other megacities of similar size. The population of the capital region will double up to 18 million and continue to rise to 23 million until 2035. Without long-term planning approaches sufficient water supply can hardly be guaranteed, despite ambitious dam projects at three rivers north (Kaliwa, Kanan, Umiray), considered the only possible solution to the water crisis by the Japan International Cooperation Agency (JICA).

The Laguna Bay south of the metropolitan region cannot be considered a proper water supply, either, since it is badly polluted, featuring a water quality B (washing) or C (toilet flush). Any use of Laguna's freshwater would destroy the lake's aquatic equilibrium.

The Metro Manila Waterworks and Sewerage Authority (MWSS) has been privatized. The rights of water distribution were allocated to the business groups Ayala (Manila Water) and Lopez (Maynilad) which however, have proved incapable of meeting the present water needs of the NCR. Studies show that 3.46 million liters of water would be needed, but only 3.00 million liters are available in the MWSS net at the moment. According to JICA reports, the water deficit will even double by 2005.

In most parts of the NCR, the pipe system does not work satisfactorily for more than four hours daily. Additionally, the increasing salinity of underground water supplies and the drying up of urban wells can hardly be stopped (Asian Development Bank 1997). Furthermore, the continually rising prices of tap water and bottled mineral water will hardly calm down the social tensions within the NCR, although even a slight increase of the water prices (up to 1.5 percent of the average urban household income) might guarantee a sufficient water supply at least until 2015 (Daiwey and Kim Hin 1998, 24).

About 30 percent of Metro Manila's inhabitants do not even have regular access to a water pipe but depend on mobile water traders, who deliver water by means of trucks, jeepneys or wheelcarts. Eighty percent of this water, however, originates from MWSS sources. This tense situation is not likely to ease up because even the "Metropolitan Manila Physical Framework Plan" (1996–2026) entails a physical extension of the NCR in order to include the suburban trading and industrial centers (Cavite, Bulacan, Laguna, Rizal). Nowadays, 9,700 hectares of agricultural land in Metro Manila's fringe areas are being transformed into development areas causing additional pressure on the regional water supply.

Housing: Squatters and Condominiums

Seventeen percent of the Philippine total population and around 40 percent of the urban population live in slums and semipermanent squatter settlements. Ramos expects no relief in the tight urban housing market in the long run (1996, 15f). On the contrary, increasing tensions pertaining to land use in suburban core areas seem a likely scenario. Growing land prices entail a diversion of living and working areas, high cost of infrastructure development and further price increases for the formal housing market which continues to be unaffordable for the overwhelming majority. This is just another reason for imminent social and political tensions beyond the control of responsible authorities.

Metro Manila is bound to face a number of specific land use conflicts due to (Berner 1997):

- Increasing squatting in urban core areas, partly on private, partly on state property.
- Hardly any housing construction for low income groups.
- Brisk housing construction for middle- and high-income groups in suburban areas along artery roads.

Potential development areas which amount to 65 percent of the NCR's total area tend to be used for privately financed condominium and apartment buildings, especially along the main road arteries like EDSA and in the urban districts of Quezon City, Makati, San Juan and Pasig, where the land prices are skyrocketing.

Although public housing has been pushed for almost four decades now, only 16 percent of the total housing needs have been met. More than half of all state subsidies have been spent for local middle- and

upperclass projects, mostly by means of funds intended for low-cost housing: The *Bliss*-projects in Quezon City, for example, were meant for lower income social classes, but these buildings are basically inhabited by university staff and public servants today (Asian Development Bank 1989, 31).

Between 1970 and 1980 the number of housing units rose at 3.4 percent per year (240,098 buildings). However, this rate dropped to only 2.6 percent between 1980 and 1990. At present, around 700,000 additional housing units would be required annually, on an annual increase of 7.3 percent. However, this would entail an adaptation of 50,000 ha. land for housing purposes (Ramos 1996, 18f).

Nevertheless, the question of land use is not only crucial for potential investors and land developers. The NCR's squatter population, amounting to around a third of the agglomeration's total urban population, has to face the prevalence of private lots, since only 635 hectares (of 3,000 ha. city area of district Manila) are state owned. In response to the urgent housing problem, the Urban Development and Housing Programme (UDHP) was established. This was designed to push housing construction for low-income groups, to govern land property, to use private sector investment, to control city growth and to allow city planning on district level as well.

Additionally, the "Medium-Term Philippine Development Plan" (1993–1998) aimed at the construction of 1.3 million new housing units to cover 34 percent of the total need. The UDHP requires land developers to contribute 20 percent of any project costs for purposes of social housing. However, potential investors have used all kinds of tricks and incomplete classifications to avoid this obligatory contribution. Consequently, middle-income residential areas such as Makati and Quezon City are sometimes ranked 30 percent below their real market value (Balisacan 1994, 146).

Globalization and Internationalization as Factors of Megacity Development

Compared to other Southeast Asian agglomerations, the NCR was integrated into international economic trade connections quite late (cf. Friedman 1997; Husa and Wohlschlägl 1999; Lo and Yeung 1996; Spreitzhofer and Heintel 2000). This is commonly interpreted as due to political turmoil during the Marcos era which calmed down only during the Aquino and Ramos era when a short economic boom stabilized the country in the mid-1990s. However, the Southeast Asian

crisis hit Metro Manila whose traditional role as the economic work horse of the archipelago made it most vulnerable to economic recession. Financial support was, as usual in Philippine crises, provided by Japan, the World Bank, the Asian Development Bank and the USA, whose special status as a former colonial power is still obvious despite Philippine independence in 1946 (Oreta 1996, 173f).

Table 3. International Direct Investment into the Philippines 1986–1996 (in Million US-\$)

Region*	1988	1990	1992	1994	1996
Japan	115.2	305.9	72.4	103.2	526.9
South Korea	1.5	21.2	42.5	14.9	104.4
Taiwan	109.3	140.7	9.1	267.8	52.9
Hongkong	26.7	241.2	12.7	287.9	281.9
ASEAN	2.4	22.8	5.7	276.5	193.6
NAFTA	160.8	103.9	63.6	675.1	56.0
EU	35.8	77.7	47.9	113.3	210.9
AUST/NZ	8.2	12.4	0.6	10.0	14.7

*Abbreviations: ASEAN (Association of Southeast Asian Nations); NAFTA (North American Free Trade Association); EU (European Union); AUST/ NZ (Australia/ New Zealand).

Source: Bangko Sentral ng Pilipinas (Sakora Research 1997; cf. Kelly 1999, 287).

Foreign direct investment reached 2.3 billion US-\$ in 1994 with about 75 percent of all investment originating from (South)east Asian neighbouring states. Community exports doubled from 1992 to 1996, which was basically due to the boom of the textile and electronics sector (Kelly 1999, 287). Increasing economic and political cooperation within the ASEAN has become apparent.

The USA and Japan continue to be the most important trading partners of the Philippines. In 1995, 51 percent of all Philippine exports, most crucial were electronics and telecommunication at 42 percent and textile fabrication at 18 percent, were aimed at these two global players that also accounted for 41 percent of all imports into the archipelago (The Hongkong and Shanghai Banking C. L. 1996, 13ff).

While the "4 Ds" (decentralization, deregulation, democracy and devolution) produced a positive economic climate after 1992, it only boosted neighboring regions north of the NCR (zone III, Central Luzon) and south (zone IV, Southern Tagalog) (cf. *Philippine Daily In-*

quirer, 7 January 1995). Additionally, the investment flows were not evenly split between the few regions that took a profit from the short period of political stability and economic boom in the mid-nineties.

Table 4. Transformation of Employment Opportunities in Urban Agglomerations (1986–1995)

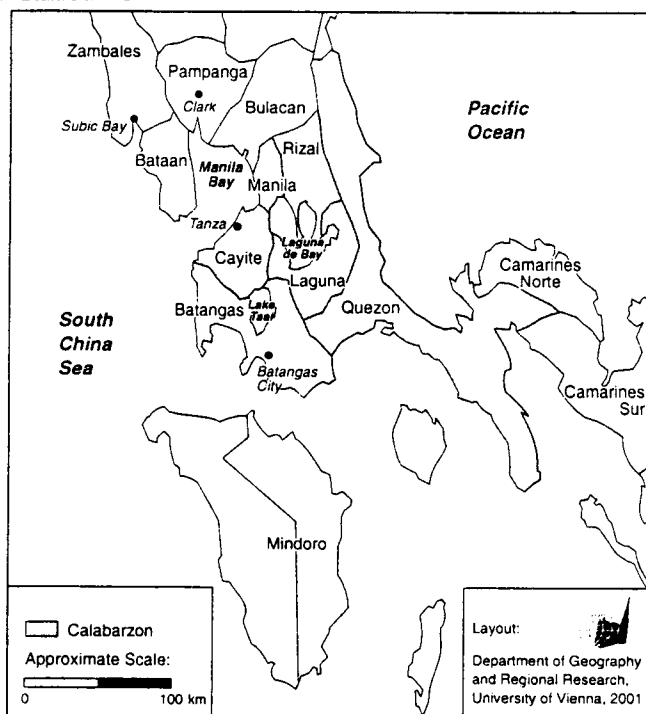
Year	Philippines (total) absol.	Central Luzon (Zone III) absol.	%	Southern Tagalog (Zone IV) absol.	%	NCR absol.	%
1986	26.287	668	2.5	2.558	9.7	19.317	73.5
1989	153.490	11.818	7.7	41.235	26.9	74.415	48.5
1992	49.483	6.900	13.9	15.589	31.5	8.252	16.7
1995	80.401	15.466	19.2	17.369	21.6	9.333	11.6

Source: Board of Investments, unpublished data (as quoted in Kelly 1999, 290).

For decades, Calabarzon has been the industrial core region not only of the NCR but the Philippines in general (cf. Mc Gee 1967; Pernia et al 1983) and thus has profited most from the temporary economic boom.⁴ Almost 50 percent of all newly created jobs of the past decade were available in the NCR and its neighboring zones III and IV with 96 percent of all new jobs in zone IV situated within Calabarzon. This concentration of both national and international investment entailed dramatic socio-economic change and a transformation of land use to an "extended metropolitan region," that is similar to a number of other Southeast Asian megacities (McGee and Robinson 1995).

In 1996, five of six approved industrial parks were located in Calabarzon (Kelly 1999, 301). The focus on Calabarzon increased infrastructural needs and contributed to the inauguration of the "Calabarzon Project" in 1991. Organized by the Japanese International Planning Agency (JICA), the generation of 3 billion US-\$ until 2010. The new approach seeks to move away from rapid industrialization in suburban areas in favor of sustainable agro-industrial growth, which is also the basic idea behind small-scale development projects. Regional development plans state that land use in the fringe areas of the NCR should be based on "rapid urbanization . . . integrating urban functions to that of agricultural development" (Province of Cavite 1990, 50).

Chart 2: Calabarzon



Quo Vadis, NCR? Future Strategies and Visions

The Metro Manila Development Authority (MMDA) is responsible for the coordination of development approaches of both NGOs and governmental institutions. It is likewise responsible for the physical expansion of the city and the implementation of the so-called "metro-services." Its explicit goal is an improvement of the urban quality of life within the capital region which shall be achieved by interregional development measures (Philippine Development 1998, 12f).

However, even theoretically well-supported city planning approaches are impeded by the lack of funds and uncontrolled land use. So far, only a few special development zones such as Clark (former US airbase), Subic (former US naval base), Calabarzon and Marilaque have been successful.⁵ "These developments are expected to reinforce the role of the NCR as the hub of international trade and industries, finance, and culture in the Asian and Pacific Region . . . to attain the status of a newly industrialized country" (Oreta 1996, 158).

Metro Manila has always been the key location for Spanish and US colonial powers whose deep impact on the country's regional development is undisputed (cf. Martin 1999). Up to the twenty-first century, agricultural and industrial investment have had direct impact on the economic performance of the NCR. Furthermore, persistent US support of former Philippine presidents contributed to a regional development strongly dependent on external decisions: "The result is . . . institutional decay rather than development and authoritarianism rather than accountability" (Neher 1999, 65). Recent political turmoil is not likely to attract foreign investors and will prevent both a sustainable improvement of living standards for the population in Metro Manila and hinder the desired increase of productivity of long-settled US and Japanese enterprises. Because of lack of funds, the urban infrastructure seems bound to deteriorate rather than improve. Stormy seas ahead? Metro Manila's ecological and socio-economic future seems to be too deeply linked to (post)colonial hierarchies and (post)feudal structures to lead to a short-term improvement in the NCR's quality of life.

Notes

1. The terms "NCR" and "Metro Manila" will be used synonymously in the course of the following discussion.

2. The ten cities are Caloocan City, Las Piñas, Makati, Mandaluyong, Manila, Marikina, Muntinlupa City, Pasay, Pasig and Quezon City; the nine municipalities are Malabon, Navotas, Parañaque, Pateros, San Juan, Tagig and Valenzuela (National Statistics Office 1997b).

3. It must be noted that the data are based on the documents filed and no adjustments for underregistration were made. The Philippine National Statistics Office (1996, 14) itself seems to doubt the relevance of national statistical data.

4. *Calabarzon* is an acronym for the five provinces *Cavite*, *Laguna*, *Batangas*, *Rizal* and *Quezon*. The Calabarzon Master Plan, which was established by the Japan International Cooperation Agency during the Aquino era aims at a comprehensive industrialization programme intended to cause spillover effects into the fringe areas of Metro Manila (Cuervo and Kim Hin 1998, 254).

5. The current planning approach is titled "Toward a humane, world-class metropolis: Physical development plan for Metropolitan Manila, 1996-2016." *Marilaque*, an acronym for Manila, Rizal, Laguna and Quezon, was designated another regional project in 1994 and is supposed to boost the national economy (Oreta 1996, 158).

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