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**Symmetric Development of Informal Settlements  
and Gated Communities: Capacity of the State  
- The Case of Jakarta, Indonesia**

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## INTRODUCTION

Informal settlements are commonplace in many developing cities, epitomized by well-known favelas (Brazil), villas miserias (Argentina) and urban kampungs (Indonesia) (Janoschka and Norsdorf, 2006), while gated communities have become a worldwide phenomenon in both developed and developing cities. Exclusive gated communities are regarded as a response to the fear of crime and the desire for status (Webster, 2002; Atkinson and Blandy, 2006). Common-interest developments (CIDs) such as shopping malls, business parks and homeowner associations are becoming popular in the United States (McKenzie, 1994). Judd (1995: 155) states that a common-interest residential development is “a community in which the residents own or control common areas or shared amenities”, and which “carries with it reciprocal rights and obligations enforced by a private governing body”.

It is usually the declining quality of municipal services in the industrial cities that gives rise to self-governance for the well-off neighborhoods with the private provision of residential facilities and amenities. Because of the status of Third World economies and low productivity, city governments of the developing countries are often disabled by the paltry fiscal revenues and thus severely constrained in the provision of necessary public and social goods. Thus, state incapacity brings about urban problems associated with the absence of law and order in the public domain. This paper investigates the rapid urbanization process of Jakarta, Indonesia, as a case of Asian high-density developing countries with the same characteristic of great land scarcity. It argues that in the setting of high population density and acute land scarcity, state incapacity is responsible for informal urban developments, which subsequently makes gated communities effective substitutes for the local state. Private neighborhoods provide civic goods and services which are usually expected from municipal governments in the industrialized nations (Glasze, Webster and Fantz, 2006). The symmetric development and coexistence of informal urban kampungs and formal suburban gated housing estates in Jabotabek, the Jakarta metropolitan region, is the corollary of state incapacity.

## INSTITUTIONAL SETTING FOR THE DUAL PROCESS OF INFORMAL AND FORMAL URBANIZATION

Informality seems to have remained a way of life for the urbanized settlements of many Third World countries (De Soto, 1989; Roy and AlSayyad, 2004). The informal economy emerges in the circumstance of influx of migrants into cities mainly driven by the rural poverty, and the formal economy cannot provide sufficient number of jobs to those newcomers. Initiated by individuals, families or communities, the self-reliant informal economy provides a means of livelihood to those who cannot find jobs in the formal sector (ILO, 1972). Informal employment reportedly accounted for 48 percent of non-agricultural employment in North Africa, 51 percent in Latin America, and 65 percent in Asia (ILO, 2002), and “the lower the level of development of a country, the larger its informal sector” (Charmes, 1990: 17).

In parallel to the informal economy, informal land development prevails in the same vein (Hall and Pfeiffer, 2000). Rapid urbanization driven by the rural poverty has resulted in sprawling slums and squatter settlements in the cities. Self-built housing violating building codes, if there are any, or having no planning permits is also known euphemistically as “popular housing”, a commonplace in developing countries. It is estimated that about 50 percent of the inhabitants in large developing cities live in these informal shelters (United Nations Centre for Human Settlement, 1987). In the decade of 1970s, informal housing

accounted for more than 80 percent of the housing stock in Cairo (Brennan, 1993). Urbanization in South America has created highly polarized cities where informal housing settlements have been ever growing to accommodate poor migrants (Perlman, 2004; Gilvert, 2004).

Urban informality is deemed resulting from low-income residents' spontaneous bottom-up response to the incapacity of the state and its formal sectors (De Soto, 1989). Government revenue as a proportion of GDP is empirically used as an indirect indicator of state capability in the management of socioeconomic development. The data, from a sample of 10 Asian countries, show that the averages are 17 percent for the developing countries and 25 percent for the developed countries (see Table 1). Boix (2001) suggests that both economic modernization and democracy should lead to the growth of government expenditure. The state capacity for the investment in public and social goods is closely correlated with the strength of national economies, and vice versa. The both low rates of government revenue as a percentage of GDP and government revenue per capita for Asian developing countries suggest a serious constraint on the performance of these governments in the national development. Poor economies and thus paltry fiscal revenues often render governments incapable of delivering public and social goods. The average government revenue per capita for the developing countries is only 3.7 percent of the average for the developed countries, based on the sample of ten selected Asian countries (see Table 1). When people's basic needs are not satisfactorily met within the formal framework managed by the state, informality emerges and becomes a mode of urban life.

**Table 1: Government Revenue as Percentage of GDP and Government Revenue Per Capita in Ten Selected Asian Countries, 2007**

Asian Developing Countries			Asian Developed Countries		
	government revenue as % of GDP	government revenue per capita (US\$)		Government revenue as % of GDP	government revenue per capita (US\$)
Bangladesh	10.6	51	Australia	26.6	8,985
Indonesia	17.9	266	Hong Kong	21.8	6,574
Philippines	17.1	265	New Zealand	39.0	8,384
Thailand	17.2	619	Japan	14.6	6,032
Vietnam	24.9	191	Singapore	22.4	7,299
Average	17	244	Average	25	6,527

Source: [http://www.adb.org/Documents/Books/Key\\_Indicators/2008/Country.asp](http://www.adb.org/Documents/Books/Key_Indicators/2008/Country.asp), accessed on 19 March 2009

Note: Exchange between local currencies and US dollar was at rates of 19 March 2009.

Social order for the homogeneous rural communities can probably be established through the manner of informality, based on mutual trust and tacit knowledge shared within the communities, and thus collective actions can be obtained without a coercive state. Dynamic urban communities are, however, heterogeneous, and collective community actions are hard to be coordinated as community members are diverse and individualistic. Those are the different characteristics between *Gemeinschaft* and *Gesellschaft*. When collectivistic social relations and tacit agreements do not exist within the ever-changing urban community, coordination of conflicts among social groups and provision of rules to urban societies as

public goods become extremely challenging, because “rational, self-interested individuals will not act to achieve their common or group interests” (Olson, 1965: 2).

Rapid urbanization is also a relatively recent phenomenon in many developing countries. While the economies and settlements are urbanized, some rural institutions are more or less in place managing society that is transforming. Informality as a way of rural life continues its usefulness as a transitory means of management in the newly formed urban settlements. Informal land development occurs because zoning as an urban institution has not set its roots in urban governance, and additional cost added by zoning regulations makes formal buildings beyond the reach of the impoverished masses.

While the informal housing development is a laudable self-help initiative when the market and the state do not perform, the mode is not without any problem in the setting of continuing urbanization and acute land scarcity. Developing countries are still expecting continuous unabated rural-to-urban migration until a matured level of urbanization is achieved. Because of primitive construction and low building technologies, informal housing is usually low-rise, and thus the quantity of housing floor areas is far from maximal. Though low-cost kampung housing is affordable to low-income social groups initially, urban land becomes increasingly more expensive over time as demand from new migrants outstripping supply of additional land (Benjamin, Arifin and Sarjana, 1985). As a result, kampung housing becomes progressively less affordable to the newcomers, and urban sprawl goes further and more open space and agricultural land are encroached upon. Collective action, rather than individual decisions, is imperative in order to achieve the goal of sustainable land use.

It is stated that “the reduction of uncertainty and the establishment of reciprocal expectations is essential for societal trust” (Misztal, 2000:7). The mutual trust built upon informality and informal institutions becomes highly unmanageable when the rural communities are transformed into heterogeneous urban ones, as informality in the latter creates unpredictability and increases negotiation costs (Misztal, 2000; Mantzavinos, North and Shariq, 2003). In diverse and highly heterogeneous urban society, informality inevitably results in irregularity and instability which erode the foundation for collective action.

State regulatory intervention in the land market is well recognized as necessary to deal with market failures such as externalities and underproduction of collective goods. Planning controls, which attenuate the private land rights by the state’s control over development rights, are regarded positive in making the land market efficient and equitable, because coercive development controls provide the land market with certainty and order which are essential for the provision of collective goods (Pigou, 1932; Lai, 1999; Nelson, 1977; Brabant, 1991). In the East and Southeast Asian countries, prevalent high population density suggests great land scarcity and consequent great potential externalities which can entail enormous social costs.

Under the severe pressure of massive influx of low-income migrants into cities, incessant land subdivision in the sector of informal development seems uncontrollable, which reduces the size of land plots continuously and creates fragmented landownership. From the perspective of property rights, fragmented landownership gives rise to a situation known as the anticommons where multiple owners have effective rights excluding each other from effective utilization of resources (Heller, 1998; Buchanan and Yoon, 2000). The anticommons prevents land amalgamation for quality redevelopment and environmental improvement. Because of small-sized land lots, self-development tends to maximize building floor areas by ignoring planning control guidelines, and imposing negative externalities on

the neighborhood. Lax governance due to informality in land rights makes the urban land development market the commons where planning control is absent and environmental amenities tend to be over-consumed. The commons is the property rights situation where resources are open to free access. Individual better-off (maximization of building floor areas) leads to neighborhood worse-off (loss of open and green spaces). In the situation of the commons, individuals seeking personal gains often lead to depletion of resources as a result of over-consumption and under-investment which harm the collective benefits (Hardin, 1968).

The anticommons and commons in the built environment create a self-perpetuating spiral of urban deterioration in the context of acute land scarcity. When the state is incapable of administering quality urban governance, the market will take its place by providing alternatives. In order to curb the commons in the absence of the regulatory state, gated housing estates emerge as the mode of market provision of amenities and club goods, responding to urban deterioration and under-provision of public goods in the informal settlements. Failed public governance and consequent informality prompt private governance over the land development market. Hence, segregation of social classes is formulated by the dual process of informal and formal urbanization.

## **RAPID URBANIZATION AND DENSIFICATION OF THE JAKARTA METROPOLIS**

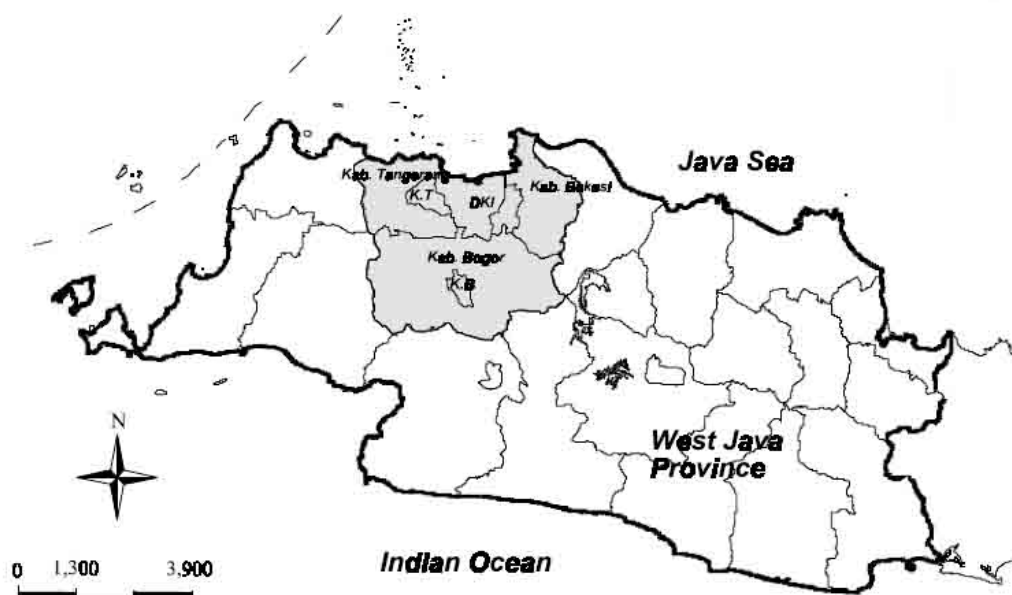
Since the 1960s, economic growth in Indonesia has been characterized by rapid change in its urban centers, and conversion of agricultural lands to urban uses on the urban peripheries at a significant rate (McGee, 1991). Rapid urbanization has been fueled by domestic industrialization and inward foreign investment, as well as driven by rural poverty, evidenced by pervasive underemployment in large cities (Rustiadi and Panuju, 2002). Urban population accounted for 17.1 percent of the national total in 1970. The figure rose to 22.2 percent in 1980; 30.9 percent in 1990, and 41.8 percent in 2000. In 2007, 50.0 percent of the Indonesians lived in cities (<http://www.unescap.org/huset/lgstudy/new-countrypaper/Indonesia/Indonesia.pdf>, accessed on 1 February 2007; [http://www.unfpa.org/swp/2007/english/notes/indicators/e\\_indicator2.pdf](http://www.unfpa.org/swp/2007/english/notes/indicators/e_indicator2.pdf), accessed on 26 March 2009).

Though Indonesia is the world's largest archipelagic country with a total land area of 1.9 million square kilometers and a vast sea area of 7.9 million square kilometers, its whole population of 242 million (2005) is unevenly distributed in regions. Java is the most populated region in Indonesia. Its population accounts for 60 percent of the national total, while its land area (132,187 sq km) represents only 7 percent of the national total (1,919,443 sq km) (Donner, 1987). On the other end of the spectrum, Maluku and Papua constitute 24 per cent of the total area of the country, but these two regions are inhabited by only 2 percent of the total national population. Six of the total nine cities in Indonesia classified as metropolitan cities with population of more than one million are located in Java: Jakarta, Bandung, Surabaya, Bekasi, Tangerang and Semarang. Medan and Palembang are located in Sumatra and Makassar in Sulawesi.

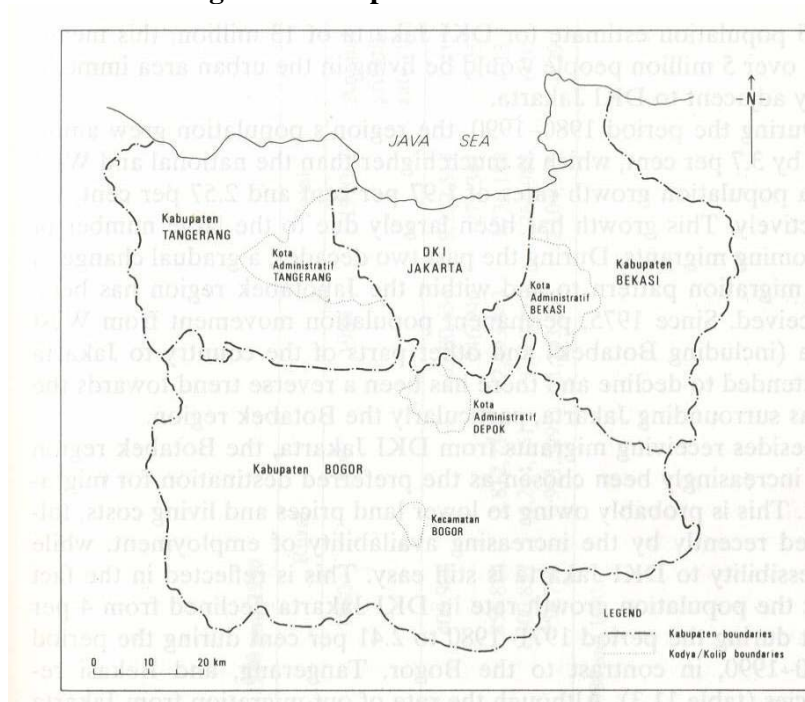
Founded in the early 14th century as a trading port, Jakarta has been named as it is called today only since the independence of Indonesia in 1945. The city was originally named Sunda Kelapa and then was renamed Jayakarta, meaning “the glorious victory”, by the Sundanese ruler in 1527. By the early 17th century, Dutch colonists came and called it Batavia until they left Indonesia in the late 1940s. Batavia was initially a small walled city with a few thousands inhabitants. During that period, the city was the head-quarter of the United Dutch East Indies Trading Company. Along with the expansion of the city, the colonial administration constructed some major infrastructure projects in the 19th century, such as railways, trams and canals. Under the two presidents Sukarno and Suharto after the national independence, de-colonization and modernization of Jakarta were ambitiously pursued, which saw numerous modern structures and boulevards added to the city (Cybriwsky and Ford, 2001). Among those physical development projects, the Golden Triangle is probably the most impressive new central business district with international-styled buildings accommodating modern business, banking, and entertainment activities.

Jabotabek is an acronym of the region composed of Jakarta, Bogor, Tangerang and Bekasi, with an area of about 6,400 sq km, in the Province of West Java (see Figures 1 and 2). In the national administrative structure of government system, Jakarta has the status of autonomous capital city special region, officially termed the Special Province of the Capital of Indonesia (Daerah Khusus Ibukota, or DKI Jakarta). Population growth in Jabotabek was drastic from 5.96 million in 1961 to 21.97 million in 2000. Growing at a similar pace, DKI Jakarta had a population of 8.60 million in 2003, rising from 0.56 million in 1942 and 1.78 million in 1952 (see Table 2). The population density (person/sq km) at Jakarta reached 13,233 in 2003, climbing from 4,566 in 1961, increased by two times over 40 years. The suburban Botabek (Jabotabek minus Jakarta) had a population density at 2,354 person/sq km in 2000, rising from 518 in 1961. The density of the whole Jabotabek metropolitan area has been rising drastically ever since the early urbanization.

**Figure 1: Jabotabek in the West Java Province**



Source: Winarso and Firman, 2002, p. 489

**Figure 2: Composition of Jabotabek**

Source: Budhy Tjahjati S. Soegijoko, 1996, p.387

**Table 2: Population Growth and Density in Jabotabek**

	1961	1971	1980	1990	2000	2003
<b>Millions</b>						
DKI Jakarta	2.97	4.58	6.50	8.26	8.39	8.60
Bogor	1.45	1.86	2.73	4.01	5.42	-
Bekasi	0.69	0.83	1.14	2.10	3.57	3.81
Tangerang	0.85	1.07	1.53	2.76	4.59	4.65
Jabotabek total	5.96	8.34	11.91	17.14	21.97	-
<b>Total area (sq km)</b>						
DKI Jakarta	650.4					
Bogor	2,885.9					
Bekasi	1,600.0					
Tangerang	1,282.3					
Jabotabek total	6,418.5					
<b>Person/sq km</b>						
Population density in DKI Jakarta	4,566	7,042	9,994	12,700	12,900	13,223
Population density in Botabek	518	652	936	1,538	2,354	-
Botabek density as % of DKI Jakarta density	11.3	9.3	9.4	12.1	18.2	-

Sources: Dharmapatni and Firman, 1995, p.309; Firman, 1997, p. 1040; Firman, 1998, p.238



## INFORMAL URBAN KAMPUNG SETTLEMENTS AND FORMAL SUBURBAN GATED HOUSING ESTATES

Influx of migrants into cities of the developing countries has often led to the predominance of urban informal developments (United Nations Centre for Human Settlement, 1987; Brennan, 1993; Perlman, 2004; Gilbert, 2004). Informal settlements, most of which are slums, are a reflection of poor economies, incapacity of the municipal government, and its inadequate regulatory authority. Informal developments are ubiquitous in Indonesia, while formal developments are exceptionally few. Struyk, Hoffman and Katsura (1990: 69) claimed that about 85 percent of annual housing production in the 1980s was developed by the occupants or residents themselves. Informal settlements in Jakarta are called urban kampungs which are characterized as overcrowding and physically deteriorated with very limited amenities such as water and sewer connections and open spaces. There is a saying that “Jakarta is not a city, but a conglomeration of villages” (Malo and Nas, 1996: 100). A conglomeration of villages, or kampungs, suggests that the city is not equipped with adequate urban infrastructure and amenities, and lack of urban zoning control over its land development. It was estimated that 65 percent of Jakarta residents lived in an area of 180 sq km, and 60 – 70 percent of them in urban kampungs, a net population density at 30,300 persons per square kilometer (Sujarto, 2002). Silver (2008: 147) estimated that about 60 percent of the Jakarta residents lived in kampungs (see Figure 3).

**Figure 3: An Urban Kampung in Jakarta**



Source: <http://archnet.org/library/images>, accessed on 15 April 2009

Menteng, a residential housing estate of high-income residents (high-level government officials, businessmen and expatriates) in Jakarta, was developed by the Dutch colonial administration in the early 1900s following the Howard's Garden City model. Kebayoran Baru, a new town in the outskirts, was initiated by the colonial government and built by Kebayoran Baru Authority in the 1950s (Silver, 2008). Since then, provision of housing had been left to the individual households to a large extent while government sponsored *Perumnas* (Bahasa Indonesia acronym for National Urban Development Corporation which

was set up in 1974) public housing was few and far between. Silver (2008:147) reckoned that only about 7,000 low-cost apartments were built between 1985 and 1995.

Rapid economic growth has brought up a middle-income class demanding for decent and quality housing, which hatches out businesses of private housing development. It was in the middle-1970s when the formal housing mortgage finance emerged in Indonesia, and State Saving Bank and Housing Finance Corporation were established in the late 1970s as a result (Marcussen, 1990). Development of private housing estates by the developers started from the 1970s' middle- and high-income gated residential quarters named Pondok Indah (literally meaning beautiful homes) in the south of Jakarta, transformed from a 720 hectares' rubber plantation.

Following up the construction of toll roads in the early 1980s, many developments of large-scale housing estates have been initiated in Jabotabek (see Figure 4). During the 1980s, about 1.5 million people left Jakarta for the suburbs Botabek (Marulanda, 1994). "By the mid-1990s there were 25 large subdivision projects in the Jakarta Metropolitan Area, ranging from 500 to 30,000 ha in size, and there were hundreds of small projects of under 500 ha" (Firman, 2000: 14). The quantity of Botabek land areas under development permits is a good indicator of the scale of intended suburban land development (see Table 3). In Botabek, about 385 square kilometers of land were to be acquired or already purchased by the developers for housing and industrial estate development over a period of 5 years during 1983 – 1988. In the 1980s, about 700 square kilometers of land in Botabek were urbanized (see Table 4).

**Table 3: Botabek Land Area under Development Permit (ha), 1983/84 – 1987/88**

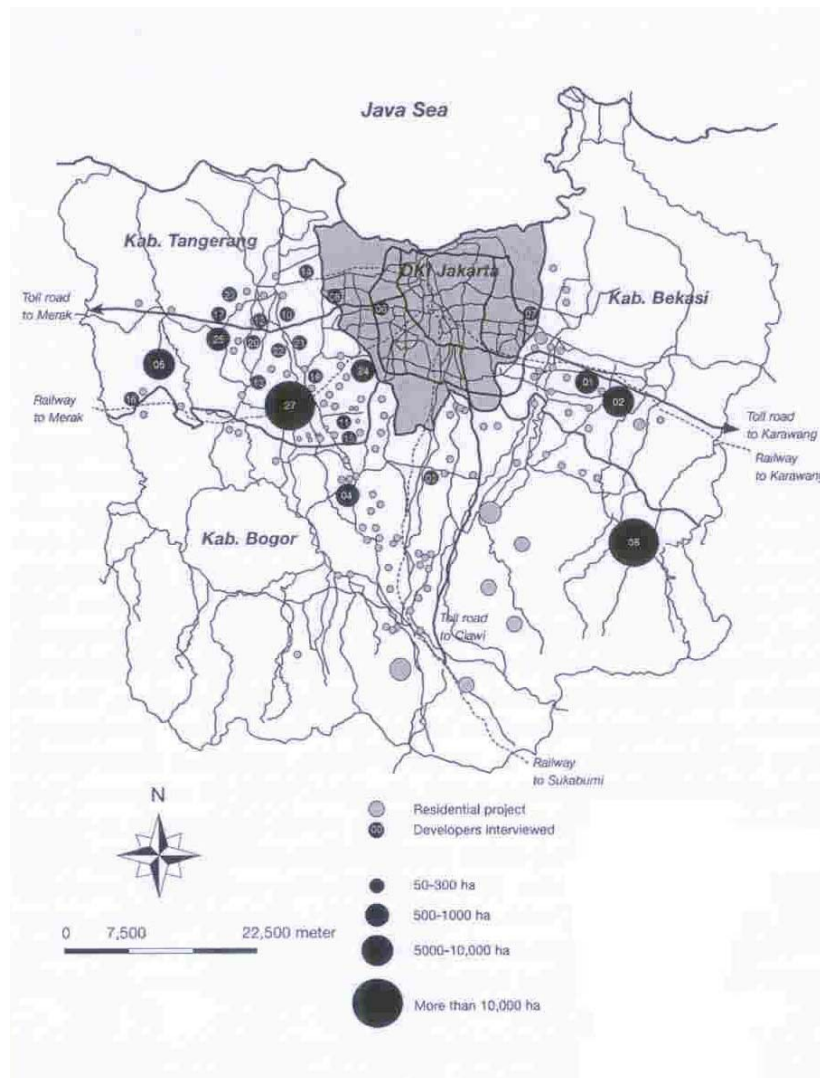
	Tangerang	Bekasi	Bogor	Botabek
Housing	27,114	2,719	3,507	33,340
Other	1,100	1,639	2,469	5,208
Total	28,214	4,358	5,976	38,548
Permit area as % of total land area	21.5	3.1	1.8	6.4

Source: cited by Leaf, 1996, p.1627

**Table 4: Growth of Built-up Area in Tangerang, Bogor and Bekasi**

	built-up area (sq km)	% of the total area	year	built-up area (sq km)	% of the total area	year
Tangerang	140.3	11.0	1980	442.1	34.5	1992
Bogor	365.7	13.1	1980	647.8	19.0	1994
Bekasi	143.1	9.6	1980	273.8	18.4	1993

Source: Cited by Firman, 1997, p.1040

**Figure 4: Development of Private Housing Estates in Jabotabek**

Note: Black dots denote gated housing estates.

Source: Winarso and Firman, 2002, p.498

The new town of Bumi Serpong Damai (BSD) has become a watershed in the history of Indonesian urbanization when a new town is built by the private sector, instead of by the government authority. The BSD new town master plan was prepared in 1984, reviewed in 1995. Its land uses include residential, commercial, industrial and tertiary education. According to the master plan prepared by the developer, BSD will cover an area of 6,000 ha, with an anticipated population of 600,000 and 139,000 houses eventually. An estimated number of job opportunities is about 140,000 – 180,000. By the end of 2003, about 14,211 houses (9,185 small houses; 3,877 medium houses and 1,149 large houses) had been built and 60,000 residents lived in BSD (see Figure 5). The developer managed to attract the Swiss German University (an international private university) to locate its campus in BSD. The German International School was established in central Jakarta in 1967. It was relocated to

BSD in 1995 because of the deteriorated environment in the central city.<sup>1</sup> Leisch (2002) provided a detailed account of Lippo Karawaci, a privately developed new town to the west of Jakarta, and his survey confirmed that more than 90 percent of the residents felt very “at home” in BSD and Lippo Karawaci.

**Figure 5: A Residential Cluster in BSD**



## **THE DUAL PROCESS OF URBANIZATION INDUCED BY THE ABSENCE OF REGULATORY STATE**

### **Absence of the State in the Management of Urban Development**

Though master plans and planning authorities were in place, there was no effective land development control in Jakarta, and building regulations were non-existent for the majority of residential quarters and urban kampungs (Marcussen, 1990; McCarthy, 2003). There are a few reasons for the absence of the state in the management of urban physical development, which may also be common to other developing Asian countries. First of all, rapid growth of urban population poses a great challenge to the inexperienced municipal government in its urban management. In 40 years, population in DKI Jakarta grew from 3.0 millions (1961) to 8.4 millions (2000), and about 80 – 90 percent of the additional 5.4 millions residents built their own housing themselves. Planning management of this large-scaled informal development was clearly beyond the capacity of poorly equipped and financed municipal government.

Secondly, indigenous institutions are still more or less in place in newly industrialized countries. Land management in Jakarta remains largely based on *adat* (customary) laws. Indonesia’s Basic Agrarian Law of 1960 states that land is controlled by the state in order to achieve “prosperity of the Indonesian people, Indonesian socialism, and *adat* philosophy”

<sup>1</sup> Many international institutions are located in suburban new towns. Bintaro is home to the British International School and the Jakarta Japanese School. An Australian-managed international hospital is located in Bintaro, and Rumah Sakit Siloam Gleneagles International Hospital (Singapore) is at Lippo Karawaci.

(Wallace, Parlindungan and Hutagalung, 2000). Because of the colonization, Indonesia has two systems of land laws: the western law installed by the Dutch colonizers and the *adat* indigenous customary law. Lands with formal titles are surrounded by a vast territory held under indigenous rights. In 1988, among the 45 percent of all households in Jakarta who claimed to own the land they were occupying, 31 percent claimed a registered land title, and 69 percent claimed an unregistered right (Hoffman, 1992: 330). A survey of nine Indonesian cities (Jakarta, Bandung, Yogyakarta, Serang, Medan, Bandar Lampung, Jambi, Balikpapan, and Kupang) showed a similar pattern of land rights: 63 percent unregistered titles and 37 percent registered titles (Struyk, Hoffman and Katsura, 1990: 93).

By the same token, land use zoning and building codes are reckoned as Western and thus colonial institutions. Urban planning is usually perceived and employed as a tool to achieve grand development vision, rather than as rules for and a means of regulation over land development and buildings. Henderson, Kuncoro and Nasution (1996) recount that in practice developers with development proposals approach government officials to apply for location permits (i.e. development rights). Land assembly can proceed with issued location permits by local officials. Subsequently, so called land use plans are passively revised to reflect the conducted land development. In spite of a frail economic foundation, the two presidents Sukarno and Suharto and Jakarta municipality had a great vision for the capital, after the independence from Dutch colonization. Jakarta was expected ambitiously to become “the beacon of the whole of mankind” with skyscrapers, boulevards and monuments (Silver, 2008: 101). Limited government revenues have been spent on the key areas of new business districts, civic centers, expressways and face-lifting projects. However, in spite of the Kampung Improvement Program, kampung life is still largely concealed by the thin veneer of modern commercial buildings that are built following certain planning models along the major roads (see Figure 6).

**Figure 6: Urban Kampung Shielded by Modern Commercial Buildings Along the Main Streets**



Source: Google Earth

Thirdly, self-built shelters are bottom-up individual or community initiatives, while both the state and market fail to respond to their housing needs, and accommodations become considerably unaffordable because of rules imposed by the legal structure adding a substantial cost to the premises built formally. When housing markets do not perform satisfactorily and local governments do not have resources to provide affordable public housing adequately, the regulatory role of the state to maintain law and order in the self-built housing market is undermined as the state does not earn the legitimacy to exercise coercive authority by interfering with residents' own initiatives (Mathey, 1992). Inadequate public and social goods are evident in Jakarta. As late as in 1990, only 2.6 out of the total 8.3 million residents (31.3 percent) in DKI Jakarta had access to the supply of piped water (Cowhead, 2002: 18). McIntosh (2003) confirmed that even in 2001 still only 31 percent of Jakarta households had access to piped water. Only 2.8 percent of the Jakarta urban areas were connected to sewer services provided by the municipal government. Contamination of surface and ground waters is widespread, and the city has been subject to frequent flooding (World Bank, 2003). The massive flooding in the early 2007 revealed the crisis in public works faced by the Jakarta municipal government. "Jakarta still relies on flood canals and sluice gates built by the Dutch 160 years ago" (The Sunday Times, 2007). With the economy growing at about 6 percent a year, private consumption has been going up, but public investment in infrastructure has been stagnant. On one of the worst days, three quarters of the capital city were inundated (Ghani, 2007).

### **Informal Settlements: The Commons in the Land Development Market**

During the rapid urbanization while there is a paucity of affordable public housing and industrialized housing construction does not exist, informal land subdivision becomes a main source of land supply for households to build dwelling by themselves. On the supply side, low-income land owners are often forced to sell parcels of their land plots for cashes needed in the urgent family circumstances (Van der Linden, Meijer and Nientied, 1985). Marcussen (1990: 123-4) elaborated on the development and subdivision of a land plot owned by a single household of Mohammad initially.<sup>2</sup> Mohammad family makes their living from rental incomes and the corner shop where Mohammad's wife sells food. There are several developments and tenure arrangements made during the period of dramatic growth of urban population: redevelopment and enlargement of houses; construction of houses on rented land, room renting, land subdivision, and changing land use. Of the whole redevelopment process, nothing has been recorded with the authority according to Mohammad. The case of Mohammad family land plot is the epitome of informal development and intensification of urban kampungs in the process of continuous urbanization in Jakarta.

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<sup>2</sup> Mohammad, a native Jakartan, bought a piece of land of 527 sqm in Pondok Bambu before 1950, and built a 36 sqm house for his family. A relative then rented a corner of the plot and built himself a house. Mohammad subsequently built himself a new house and let out the original house, and built a tiny room to be used by a second relative at another corner of the site. When Mohammad needed cashes in a large lump-sum for urgent family needs, the land was subdivided into two pieces and a plot of 95 sqm was sold off. A new building with seven rental units at 16.5 sqm each was also constructed. Furthermore, a new living room and a corner shop were added to Mohammad's house. At this stage, 11 households – Mohammad's, two relatives', seven tenants' and one household on the sold plot – were living on the site originally for a single family.

Leaf (1993: 484) reckons that “the majority of lands which comprise kampung neighbourhoods in Jakarta are unregistered”. It is reasonable to infer a high correlation between informal titles and informal developments. On the one hand, because lands with informal titles are not registered, land subdivisions are easy to carry out without going through authorities, as transactions of *adat* lands can be sanctioned by the village head. On the other hand, lands with informal titles cannot be used as collateral for raising loans (Hoffman, 1992). It is more likely that informal housing developments occurred on lands with informal titles than on lands with formal titles. Furthermore, it is estimated that market prices of *girik* lands are about 80 percent of those land with formal titles, and *garapan* lands are priced at only 65 percent of the market value of lands with formal titles (Leaf, 1993)<sup>3</sup>. Being cheaper than those registered lands, lands with informal titles tend to be sold to those looking for owner-occupation, as the informal titles are equally secured as the formal titles. As a result, incessant land subdivision becomes uncontrollable because of rapid increase of low-income migrants. Archer (1993) reported that in Medan, a city in Sumatra, there was an urban fringe site of 78.9 ha under consideration for land consolidation. The site was initially composed of 314 land parcels. A two-year delay of the proposed project because of budget constraints, the site was further subdivided into 510 parcels with 445 owners in 1989.

The dichotomy between formal and informal land rights has actually been shaped since the Batavia time. The dual land use structure of Pecenongan in the central Jakarta had been in place since the 1860s when kampungs were shielded by formally developed buildings along the major roads (see Figure 7). 150 years later, the same structure remains with only one visible difference: rural kampungs having become urban kampungs along with the intensification of land uses driven by rising urban population (see Figure 8). The capacities of roads, canals and the railway remain more or less unchanged, while the number of residents has increased significantly over the period. Kampungs have slipped into slums as urban infrastructure and amenities do not keep pace with the rising land use intensification.

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<sup>3</sup> *Girik* literally means tax receipts. Land with the *girik* title signifies that the holder should have the land tax receipts which suggest the land holder pays land tax regularly and become the proof of customary ownership. *Girik* land has full property rights similar to freehold ownership. Ownership under *hak garapan* (use right) is based on transfer agreements between individuals, a weaker claim than *hak girik* (Winayanti and Lang, 2004).

**Figure 7: Pecenongan, Jakarta, in the 1860s**



Note: The shaded areas are rural kampungs.  
Source: Merrillees, 2000, p.94

**Figure 8: Pecenongan, Jakarta, in 2006**



Note: The shaded areas are urban kampungs / slums.  
Source: Google Earth



Fragmented land holding in the context of high density makes land assembly at very high transaction costs, as land agglomeration involves numerous landowners. Because of small-sized land lots, informal self-built housing tends to ignore planning control guidelines in order to maximize the built-up floor space. Failure in undertaking what the government is duly responsible for (such as providing public and affordable housing) does not earn the government legitimacy to manage society according to the rules. Demolishing illegal housing means forcing tenants homeless while there are severe housing shortages. The land development market in the neighborhood of informal constructions has become the commons where environmental amenities are over-consumed. The absence of planning control generates substandard, inferior and deteriorating habitation.

High-density informal development has created unique Indonesian urban kampungs, facilitated by informal land rights. Slums of urban kampungs demonstrate failures of the state in urbanization: a dearth of public housing; high transaction cost in land assembly because of fragmented land ownership and exacerbation of informal land rights; uncontrolled environmental externalities because of non-observation or non-existence of development controls. State failures lead to suboptimal utilization of limited land resources and environmental deterioration.

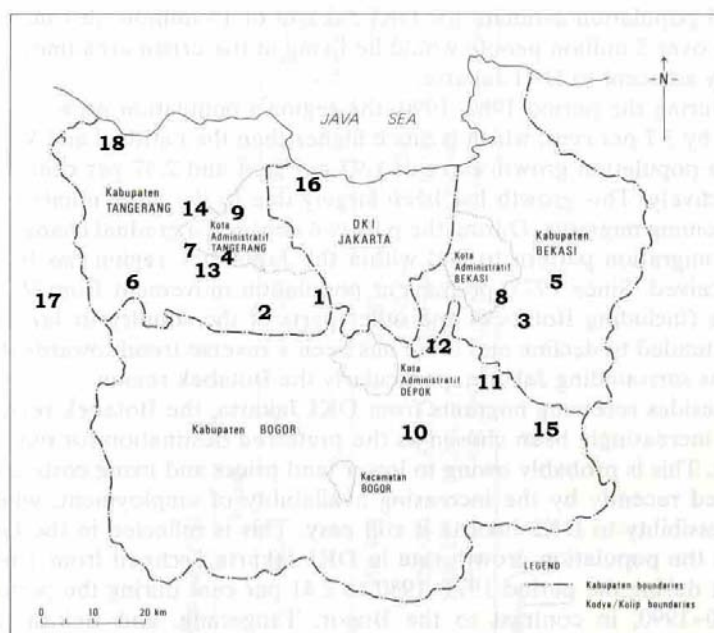
### **Formal Development of Gated Housing Estates: Private Provision of Urban Amenities with the State as a Facilitator**

Though gated European communities were common in those colonial cities (including Jakarta) in the Southeast Asia, ethnic and social enclaves were not usually protected by walls and gates. Ubiquitous informal developments in the course of rapid urbanization suggest failures of the state both in the provision of adequate environmental amenities and infrastructure for a functional living environment, and in the provision of order for development markets. It is inevitable that gated housing estates should appear in the suburbs where large land parcels are available. Necessary amenities and facilities for the quality residential living are provided as club goods, and land use planning is privatized in the gated communities as public land use planning has failed to perform what is designated. Apparently, developers have been in favor of building large-scale self-contained townships in the suburbs which are deemed viable for the private provision of public goods with economies of scale (see Table 5 and Figure 9).

**Table 5: Estimated sizes of some large-scale housing estates, 1997**

No.	Housing estate	Area (ha)
1	Bintaro Jaya	1,700
2	Bumi Serpong Damai	6,000
3	Lippo Cikarang	3,000
4	Lippo Karawaci	2,600
5	Cikarang Baru	5,400
6	Kota Tiga Raksa	3,000
7	Citra Raya	1,000
8	Kota Legenda	2,000
9	Kota Modern	1,500
10	Bukit Sentul	2,000
11	Citra Indah	1,200
12	Kota Wisata	1,200
13	Gading Serpong	1,000
14	Puri Jaya	1,700
15	Bukit Jonggol Asri	30,000
16	Pantai Indah Kapuk	1,000
17	Kota Tenjo	3,000
18	Teluk Naga	8,000

Source: Winaso, 1999b, p.291

**Figure 9: Location of Large-scale Housing Estates, 1997**

Note: Refer to Table 2.9 for the estates indicated by numbers.

While the government as the regulatory state is conspicuously absent, land assembly for the private township development cannot succeed without the visible helping hand. There is growth coalition between the government and private developers. Developers need to apply for land development permits (*ijin lokasi*) as the first step into the real estate development process. It suggests that the proposed development is approved on the land in question, allowing developers to acquire and assemble land parcels for further development. Once a developer holds a development permit for a parcel of land, s/he has a pre-emptive right to prevent other developers from acquiring land within the permitted area (Ferguson and Hoffman, 1993). The developer's exclusive right restricts landowners' options. The design of the development permits facilitates the land assembly as land parcels held by farmers tend to be small in size in high density regions. High transaction costs in negotiation and competitive holding-out are mitigated. A case study of Taman Adiyasa by the author shows that the developer had to deal with 450 land owners by assembling land parcels to 150 hectares, 3,000 square meters per owner on average.

Land development should be guided by land use plans and controlled by development permission. The institution of land development permits is meant to be a mechanism of guiding land developments and facilitating land assembly according to the land use plan (Archer, 1993). Unintentionally, it facilitates speculative land holding and thus the concentration of land with development permits in the hands of a few big developers (Firman, 2004). Land hoarding is apparent, and big developers are holding large amounts of land. Winarso (2002) surveyed 60 developers out of 86 housing development projects in operation at 1997 in Tangerang, and found out that these 60 development companies held development permits for 27,090 hectares of land. However, 6 of them had a land holding of 18,280 ha on aggregate, accounting for 67 percent of the total. According to Winarso (1999b), the land area held under the development firm "Si Pengembang" in Jabatabek amounted to 16,100 ha in 1994.

The locations of gated housing estates are also chosen by the developers themselves, rather than by the regional or municipal planning. The first Development Plan for Jakarta Metropolitan Region (Jabotabek) was prepared in 1974. Land use plans are usually broadly indicating rather than specifying land uses. The Spatial Planning Act (1992) has made land use plans statutory. Local spatial plans have to be approved by the local assemblies and ratified by the central authority. Plans are to be reviewed every five to ten years. However, the state is explicitly absent from the implementation of township planning and management of township development. The development of private townships has not been directed by the government's spatial planning strategy.

Serpong was not intended to be a major urban center in the Jabotabek Metropolitan Development Plan. It was suggested mainly as a large dormitory town. However, the developer proposed the expansion of BSD from its 1985 population size of about 10,000 to a metropolitan core city with a population of 600,000 by 2005 on an area of 6,000 hectares, and BSD was to be a core city in Jabotabek. It openly competed with other urban centers for investments (Douglass, 1991). Large developers can influence the preparation of spatial plans. The Structure Plan in the 1980s for Tangerang where the BSD was located was drafted by PT Arkonim, PT Pembangunan Jaya and a Japanese Consultant. The first two companies were owned by Ciputra. The consultants accommodated the developer's intention to develop a new town at Serpong. These plans were approved and formally adopted in 1987 (Winarso, 1999a). A toll road was proposed by private developers to link Bintaro Jaya, BSD, Citra Raya, Puri Jaya, Teluk Naga and Pantai Papuk Indah, and those six new towns were all developed by

Ciputra. This scheme was not considered in the Jabotabek Plan. The road plan was elaborated in the preparation of the Tangerang Spatial Plan, but the construction of the expressway had already started (Winarso, 1999b). It is evident land use planning for the private new towns in the suburbs is privatized as well (see Table 6).

**Table 6: Land Development in Compliance and Non-compliance with Zoning in Botabek**

Area	Compliance with zoning		Non-compliance with zoning		% of non-compliance in the total in terms of area
	No. of sites	Size (ha)	No. of sites	Size (ha)	
Botabek	237	17433.5	403	33338.0	65.7

Source: Cited by Susantono (1998), p.140

## CONCLUSION

Rapid urbanization driven by industrialization and rural poverty in the developing countries often gives rise to informal urban development in the context of state incapacity, which is demonstrated in Jakarta where informal urban kampungs are ubiquitous. High population density and thus great land scarcity induce acute competition for the access to the limited urban land resources without necessary order as the regulatory state is absent. Informal land developments not protected by the formal property rights exacerbate the problems of informal land subdivision and illegal construction. The land rights situations of the commons and anticommons explain the existence of over-consumption of environmental amenities and impediment of land fragmentation, and thus urban neighborhoods are trapped in a self-perpetuating spiral of deterioration.

When public governance fails, private governance arises to fill the void. During the process of rapid urbanization, development of private housing venture into the suburbs en masse to avoid the commons in the Jakarta city. The mode of gated housing estates facilitates the private provision of urban amenities and necessary facilities needed for the fulfillment of the emerging middle class' housing aspiration. It is intriguing that the municipal government fails to perform its regulatory role over the informal urban development, and it also gives up its regulatory function in the planning of suburban gated housing estates. Instead, the local state is relegated to a facilitator helping private developers in their endeavor at assembling land parcels for the development of large-scale townships. Jakarta's suburbanization is thus largely led by the market and privatized land use planning. Therefore, the symmetric development of informal settlements and gated communities is induced by the same factor of state incapacity, manifested by the concomitant deterioration and privatization of urban spaces. Social polarization is exacerbated by the spatial segregation. The key to the ending of spatial dichotomy of social classes lies in the collection action orchestrated either by the effective state or by the communities. The state, as the third party maintaining rules and order, must earn credibility through the delivery of public goods and social facilities in the first place, on the one hand. Collective action organized by the communities, on the other hand, remains a formidable task in the context of dynamic transition and social heterogeneity.

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