

New Town Development in Jakarta Metropolitan Region (JMR): a Perspective of Spatial Segregation

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The extent to which land and new town development has reinforced spatial segregation in Jakarta Metropolitan Region (JMR) is discussed. The demand for new town has been essentially generated by the need for security and fulfilling exclusive life style, while innovative have been able to sell an image of new town as a symbol of 'modernism.' New town development has reinforced spatial segregation in three ways: First, it has polarized the middle and upper income groups, resulting in scattered pockets of exclusive residential areas. Second, within the new towns themselves, the upper middle and high class occupied exclusive designed areas and to the highest security possible. Third, in several new towns urban development management are carried out by the developers, instead of by the City Hall. The spatial segregation in JMR can be classified as 'self segregation' or 'voluntary segregation.' It would continue and it is inevitable, resulted from socioeconomic and political condition of the urban society as a whole.

This paper is concerned with the extent to which land and new town development have reinforced spatial segregation in Jakarta Metropolitan Region, the largest concentration of urban population and economic activities in Indonesia. Spatial segregation refers to the residential separation of sub-groups within a wider population which could be associated primarily with racial groups, ethnicity, religious beliefs or income status (Johnston et al, 1983). According to van Kempen and Ozuckren (1998) spatial segregation comes into existence when some areas show an overrepresentation and other areas an underrepresentation of members of group. It could exist between housing estates within neighborhoods, between urban neighborhoods, and between cities and its surrounding areas (p.1632; see also Marcuse and van Kempen, 2000a).

Jakarta Metropolitan Region (hereafter: JMR) covering an area of approximately 7 500 sq. kilometer, including Jakarta city and its surrounding areas: Bogor, Tangerang and Bekasi. This area had a total population of more than 21 million in 2000, consisting of about 80% urban population and 20% rural population, with the population growth rate of 2.18 per year over the period of 1990-2000. The Jakarta city, the core, had 8.4 million people in 2000 (Central Board of Statistics, 2000).

A number of new towns have been developed in JMA since early 1980's. In fact, by mid-1990's alone there had been nearly 25 large subdivision projects in the area, ranging from 500 to 6 000 hectares in size (Table 1), built by developers mostly belong to 'Real Estat Indonesia' (REI), an association of Indonesia's corporate housing developers. However, by 2002, only about three-fifths of the projects still survived because of the prolonged economic crisis (Table 1), meanwhile the number of developers in JMR belong to the REI drastically dropped from 736 in 1996 to only 260 in 2001 (Jurnal Properti, January 2002). More than 450 developers were out of business during the period.

As Leisch (2000b) argues that from developers' point of view new towns in JMR have been developed with three main objectives in mind: First, to fulfil people's desire of living in a quiet, modern and secure environment; second, to give them investment opportunities; and third, to get huge and quick monetary profits (p.1). Number of the new towns are basically designed as exclusive residential areas surrounded by wall, containing rows and clusters of houses along standarized automobile throughfares (Leaf, 1994, p. 343), resulting in a kind of 'gated communities' as they are known the western societies, such as those in southern California. Sizeable prime agricultural land in the fringes of Jakarta City had been converted providing sites for the new town projects. During the time in which they are constructed, there were easy access to investment funds as the international and national market had propelled the growth of the property sector, including new town development, in JMR (Dijkgraaf, 2000).

There are two types of new towns in JMR: first, completely new towns built on the fringes on land that used to be agricultural or plantation areas; and second, new-town-in-town, which are developed within the Jakarta city area through urban renewal projects in the existing residential areas, mostly kampung (precint) or other urban land uses. This study is focussed on the first of these, as they are much more extensive than the latter. Referring to Phillips and Yeh's (1987) classification of new towns in East and Southeast Asia, JMR new towns could be classified as those which are a continuation of core city's built-up areas.¹⁾

Table 1

New Town Project Occupying Land of 500 Hectares and Over
in Jakarta Metropolitan Region, 1995 and 2001

No.	Project	Area (Hectare)	Location	1995	2001
1.	Bumi Serpong Damai	6 000	Tangerang	X	X
2.	Kota Tiga Raksa	3 000	Tangerang	X	X
3.	Bintaro Jaya	1 700	Tangerang	X	X
4.	Citra Raya	1 000	Tangerang	X	X
5.	Gading Serpong	1 000	Tangerang	X	X
6.	Kota Modern	770	Tangerang	X	X
7.	Alam Sutera	700	Tangerang	X	X
8.	Kota Jaya	1 745	Tangerang	X	-
9.	Pantai Indah Kapuk	800	Tangerang	X	X
10.	Lippo Karawaci	700	Tangerang	X	X
11.	Lippo Cikarang	3 000	Bekasi	X	X
12.	Kota Legenda	2 000	Bekasi	X	X
13.	Harapan Indah	700	Bekasi	X	-
14.	Cikarang Baru	5 400	Bekasi	X	X
15.	Rancamaya	550	Bogor	X	-
16.	Royal Sentul	2 700	Bogor	X	X
17.	Banyu Buana	500	Bogor	X	-
18.	Maharani Citra Pertiwi	1 679	Bogor	X	-
19.	Bangunjaya Triperkasa	500	Bogor	X	-
20.	Kuripan Jaya	500	Bogor	X	X
21.	Resor Danau Lido	1 200	Bogor	X	-
22.	Pantai Modern	500	Jakarta	X	-
23.	Kota Wisata	n.a.	Bogor	X	X

Source : 1. adapted from Firman, 1997, p.1036
2. Jurnal Properti, VIII, January 2002, p. 2.3

Note : X, still in operation;
-, no longer in operation or completed

The large-scale housing projects and new town development in the periphery of JMR have intensified the daily interaction between Jakarta, the core of JMR, and the new town surrounding it, as almost all of the new towns largely serve as dormitory towns. In fact, the JMR new towns are socioeconomically still heavily dependent on the core, that is, the City of Jakarta, which in turn have resulted in an exacerbated traffic problems in JMR. As Leisch (2000b) also maintains that decentralization of urban activities from the City of Jakarta, the core of JMR, to the periphery is not the objective of the private developers who build the new towns in the area, as they do not provide working places for the new town residents

(p.1). Moreover, new towns in JMR had been developed by different developers which were separated to each other and badly linked to the existing infrastructure system in the area (Dijkgraaf, 2000). Obviously, the new town development violated not only the JMR but also Jakarta City master plan, since in reality it was the developers who 'planned' physical development of the city at the time.

In contrast, the majority of JMR residents, notably the poor and lower middle-income groups still live in unplanned and unregulated settlements, notably urban 'Kampung' in the city center of Jakarta and semi-rural settlements in the periphery, which also reflects the socio-economic dualism of Indonesian society. The existence of exclusive new communities on one hand and 'Kampung' on the other hand in JMR as well in other major cities in Indonesia, basically reflects the widening socio-economic disparities of urban societies and spatial segregation based on level of income and life style. Richer communities live in exclusive residential areas of JMR, including the new towns in the outskirts, while the poor reside in slum areas throughout the city²). As a result, new town development in JMR continued to create enclave residential areas segregating the rich and the poor (see also Kusbiantoro, 1999).

Against this background, this paper will examine forces and factors affecting recent new town development in JMR, including investment, investor behavior, financial institutions, urban land and settlement development policies, and the consumers. It will then discuss the extent to which new town development has reinforced spatial segregation in the area and its socio-economic implications. It should be stressed from the outset, however, that this study is not intended to examine in detail the socioeconomic differences between residents living in the Kampung and slum areas with those living in richer communities in JMR³). The study also has no intention of examining the development of middle and upper class in the area.

There have been several studies on new town development in JMR focussing on various issues, such as social dualism (Cowherd, 2000), structures and functions (Leisch, 2000b), economic crisis (Winarso and Firman, 2002) and gated communities (Hogan and Houston, 2001; Leisch, 2002), but there has been no study looking at new town development in JMR from the spatial segregation theoretical perspectives. There are some

discussion on the extent to which new town developments were reflected in the formation of gated communities in JMR (see Leisch, 2000a and Hogan and Houston, 2001) prior to the economic crisis, but the present study will update the situation and development after the economic crisis in 1998/1999.

Apart from the introduction, Part 1, this paper contains five parts. Part two discusses some theoretical perspectives of spatial segregation, as a context to this study. Process of land and new town development in JMR is examined in part three; Part four discusses the demand for new towns. Part five examines the extent to which new town development has reinforced the spatial segregation in JMR; Part six summarizes and concludes the discussion.

Theoretical Perspectives on Spatial Segregation

Spatial segregation is essentially a manifestation of the existing socio-economic structure and a mechanism to enforce that structure (Greenstein et. al.,2000). Determinants of spatial segregation are many and vary for one place to another, including the explicit ones such as legal frameworks of land use development (see also UNCHS, 2002). Nevertheless, as Greenstein et. al (2000) further argue that voluntary spatial segregation has become a new phenomenon, induced by both demand factors, such as security or a new lifestyle, and supply factors, most notably profitability with large-scale internalization of externalities in these highly controlled developments (p.7). In turn, the voluntary spatial segregation has given rise to gated communities in both developed and developing countries. In the USA, as Blakely and Snyder (1997, in Jurgens and Gnad, 2002) describe, there are three types gated communities, including lifestyle communities; prestige communities; and security zone communities, whereas those in Southeast Asia reflects mixture of societal needs, modern design ideas and capitalis imperatives (Leisch, 2002, p.341).

Several studies have found out that globalization had intensified spatial segregation in cities. For example, de Queiroz Ribeiro and Telles (2000) show that recent socio-economic changes in Rio de Janeiro suggest a tendency of reinforcement towards spatial dualization and fragmentation

in the city. Likewise, there is a tendency of increased hardening of spatial boundaries between income, race, and religious groups in Calcutta, along with integration of the city into the global economy (Chakravorty, 2000, pp.73-74). Similarly, spatial segmentation by space and ethnicity is clearly evident in a Global City such as New York City, reflecting the durable segmentation of economy and labor force by the same dimensions of ethnicity and race (Logan, 2000, p.182). On the whole, as Marcuse and van Kempen (2000b) maintain that there are some changes in spatial order in several large cities, both in developed and developing countries, characterized by sharper spatial divisions among the quarters of the city, and increasing walling among the different quarters (p.271). In overall, large cities in the world have become more segregated in character (UNCHS, 2002; see also Webster, Gillase and Frantz, 2002).

According to van Kempen and Ozukren (1998) there are three 'traditional perspectives' to explain patterns and process of spatial segregation: first, there is human ecology approach which sees city as a separated entity and considers that city develops through a competition for space, resulting in zones in which different socio-economic characteristics of housing are located; second perspective is based on social area analysis and factorial ecology which try to map out socio-economic spatial patterns of cities; third, behavioral approach, focuses on the demand side of the housing market (pp. 1636-1638). In addition, there are two other approaches, including Marxist and Neo-Marxist perspectives, which regard spatial segregation as a reflection of social class, and Neo-Weberian perspectives which perceive spatial segregation as an outcome of group access to housing market (p. 1640).

In a slightly different version from the above discussed theoretical perspectives, Falah (1996, p. 824) argues that there are three theories associated with spatial segregation, including: the 'class theory' which perceives spatial segregation as a manifestation of socio-economic class; the 'self segregation theory' which explains spatial segregation as a result of preference of group to live in area of predominantly the same group - in the USA, for example, whites prefer to live in predominantly white areas; the 'discrimination theory' which sees discriminatory housing barriers as a principal factor of spatial segmentation -in the USA the black are prevented of living in neighborhoods even if their incomes and preferences might allow it.

Within the context of developed countries, there are two competing perspectives in studies of recent residential segregation (Wessel, 2000). The first considers the economic structuring has transformed western capitalist city, reinforcing social stratification and socio-economic segregation and also deepening the gap between poor and rich areas in the city. In this perspective, the economic restructuring has resulted in social inequality and spatial segregation of people at the upper and lower end of social stratum (p. 1963); The second perceives that social stratification should be considered independently from residential segregation, which explain why rich people do not necessarily live in rich areas of the cities (p.1947).

Spatial segregation in urban areas is considered undesirable, especially if it is linked to ethnic segregation and it could even cause lack of empathy for those who live in other areas (Goldsmith, 1997; see also Christopher, 2001). Segregation is seen as a problem if it constraints services and opportunities available to other groups who reside in other areas (see also UNCHS, 2002). That is one of the reasons why in several countries government have tried to prevent or reduce spatial segregation. In the Netherlands, for example, the government has tried to promote restructuring urban neighborhoods by mixing income groups and thereby creating mixed communities. This has been done by building expensive houses in traditionally low income areas (van Kempen and Priemus, 1999, p.641).

Quite often, spatial segregation is also resulted from the failure of urban planning system to cope with urban development process as a whole, which has only reacted to and tried to address short-term urban problems. In Accra, Ghana, for instance, the city planning system has resulted in segregation of the residential parts of the city, marked by a contrast between the well-planned upper class housing estate, which are occupied by the higher income group, senior government officials and military personnel, and the poorest urban settlements which are the slum comprised of enclaves of indigenous settlements with building that are constructed with no regard at all to the urban planning system (Larbi, 1996, p.212-213).

On the whole, segregation has both positive and negative impacts on urban development. For instance, it could become a form of social exclusion that make life difficult for the needy, but it could also strengthen cultural and social group identity (UNCHS, 2002, p.50).

Land and New Town Development in JMR

Modern new town development is not a new phenomenon in Jakarta. In fact, it is basically a Dutch colonial legacy. As Leaf (1996) notes that new town development in Jakarta is dated back to the early 19th century when the Dutch colonial government built Weltevreden and Meester Cornelis 'new towns' in Batavia (now the city of Jakarta), using a new settlement pattern with airy large estate, which were quite distinct from congested setting of the old town. Following that, in early 1950s the early Indonesian government planned and developed Kebayoran Baru area as a residential town in the southern Jakarta, which now becomes a middle and upper income residential area in the city. Later, in early 1970s a developer successfully built 'Pondok Indah', a new residential area in the south of Jakarta city, which is now a medium and upper income residential area in the City of Jakarta.

One of the characteristics of the recent new towns in the outskirts of JMR is they are mostly made up of low density, single-family houses, and exclusive residential areas for middle and upper income groups (Leaf, 1991 and 1993). Some of the new towns, like Bumi Serpong Damai and Lippo Karawaci (Table 1) have excellent infrastructure and facilities, including schools, shopping malls, cinemas, hospital and even golf courses.

The vast new town development has greatly induced by land speculative undertaking by several private developers on the one hand, and uncontrolled land permits granted by the National Land Agency (BPN) for housing development in the area on the other hand. As a result, there has been a massive land ownership transfer from the previous landowners, notably poor farmers, to the new town developers supported by the government. Meanwhile, those who lost their land, with or without fair compensation, have to seek new livelihoods.

Land conversion for new town development in JMR has largely been uncontrolled. As a matter of fact, the process tends to become a 'land business undertaking.' As Archer (1993) correctly points out, land permits have been issued in JMR for excessive land areas of land relative to the applications and intentions of developers and their ability to develop the land. The land permit system (*ijin lokasi*) has facilitated the assembly and development of much land (p.14).

Due to the uncontrolled land permit system, many of the land areas that have long been acquired are not yet developed, creating idle, unutilized land (tanah tidur: 'sleeping land'). Almost 72 000 hectares of development permits were issued for subdivision from November 1993 to July 1998 in Jakarta fringe areas (Botabek: Bogor-Tangerang and Bekasi), averaging about 12 500 hectares per year. This amount of land was more than enough to house more than 8.5 million people, assuming 60 per cent housing coverage and density of 200 persons per hectare (Arcadis Euroconsult, 1999). In most cases developers obtained loans for land acquisition and house construction from banks of their own group of businesses, which often resulted in violations of standard of loan worthiness and the legal lending limits ('Batas Maximum Pemberian Kredit': BMPK) in accordance to the 1992 Indonesian Banking Law, which states that banks are only allowed to provide loans maximum of 30 per cent of the total bank capitals to affiliated firms, including property firms, and affiliated individuals. In fact, many national private banks are overextended in providing loans to property firms.

The land acquisition process in JMR usually involves brokers ('calo tanah') who extract large amount of money as a commission fees and make the process more complicated. A study shows that the 'calo tanah' in Jakarta collected about 10 percent from transaction valued less than Rp. 100 million, and about 5 percent otherwise (Dorleans, 1994, p.50; see also Dorleans, 2000). This reflects the absence of an effective mechanism to control land transfers on 'equal' bargaining positions (see also Ferguson and Hoffman, 1993; Firman, 1997). The recent land development permit system in Indonesia essentially reserved land nearly exclusively for approved developers and this has greatly encouraged speculative trading in land with resultant high profits (Firman, 1997; see also World Bank, 1994).

The land utilization in JMR outskirts is frequently characterized by 'conflicts' involving communities of land owners, the developers, as well as the local government. The 'conflicts' have often ended up with the eviction of old occupants. Once a land development permit ('ijin lokasi') is granted to a developer, others are not allowed to purchase and develop land within the permit areas unless they obtain permit-holder's formal consent (Firman, 1997)⁴. There have been several protests and struggle among land

owners for fairer compensation but in most cases they finally found themselves powerless against developers who often directly and indirectly intimidate them. For example, the development of Tigaraksa new town (Table 1) led to the eviction of about 1 400 land-owning agricultural households from the area (Suhendar, 1994, p.23).

By mid-1990s, land in the outskirts of Jakarta had been largely controlled by private developers who build new town and industrial estates. A rough estimate shows that by early 1990s about one-half of the total land area under land development permits was being held off the market by the developers (Leaf, 1991 and 1993). There was even a controversial plan to build a series new town of 30 000 hectares in Jonggol area in Bogor District, South of Jakarta, called Bukit Jonggol Asri (Beautiful Jonggol Hills) mandated by a Presidential Decree (Keppres) run by a consortium led by a son of President Soeharto. The consortium had even negotiated with the government that several central government offices in Jakarta were to be moved to this controversial planned new town (see also Cowherd, 2000), but it was never realized, as the economic crisis hits Indonesia badly. In fact, the Decree has been cancelled by the new government.

Development of new town in JMR has had almost nothing to do with any spatial planning of the area (see also Goldblum and Wong, 2000). There have been many violations of land use plans by developers and even by the local government themselves in JMR due to pressures and interests in locating what considered to be profitable activities (Firman, 1997, p.104). Indeed, the new town development in JMR involves only small proportion of housing stock in the area, but the relatively low density of this development has significant impact on urban land in the periphery of JMR (Leaf, 1994, p.344).

The capacity of the local government to manage and implement spatial plan ('Rencana Tata Ruang'), particularly for monitoring and controlling land conversion, has been notoriously inadequate, whereas pressures from the developers are immense. Many developers in JMR ignored land-use plan and regulations when they built the new towns and large-scale subdivisions in the area. Bribery payment 'over and under' the table were a daily routine in public sector (Dijkgraaf, 2000, pp.1-2).

The development of property sector in Indonesia, including new town development, in the 1980s until mid-1990s, basically reflects the global capitalism in which transnational capitals flows freely to support investment in the built environment as a means of capturing and sustaining its presence and benefits (Douglass, 1998, p.4). Property loans in Indonesia reached almost Rp. 73 trillion by October 1998, which made up almost 13% of the total loans of Rp. 574 trillion provided by Banks in Indonesia in 1998 (Properti Indonesia, December 1998).

Nevertheless, the recent economic crisis in Indonesia has severely affected the property sector due to oversupply as a result of aggressive expansion of this sector during the 1990s.⁵⁾ Large-scale housing development in the fringe areas of large cities has now slowed down, in some cases even coming to a complete stop. As the economic crisis continues, hundred of developers of various sizes in the area have gone bankrupt, some even with severe debts both to domestic and overseas banks. Meanwhile, the transactions in the property sector in JMR is estimated to have dropped substantially from Rp. 2.6 trillion in 1996 to Rp. 1.7 trillion in 1997 and only Rp. 0.8 trillion in 1998 (Simanungkalit, in Tempo, 11 January 1999). Most of the property firms and developers in JMR have overinvested using unhedged short-term loans for both land acquisition and building construction, with high market interest for long-term projects, including offshore loans. This situation occurred not only in Jakarta, but also to many large cities in Southeast Asian countries, including Bangkok and Manila (see Quigley, 2001).

Until recently, the JMR's outskirts have been characterized by number of half empty and unfinished new towns or large-scale subdivision (Firman, 2000; see also Dijkgraaf, 2000). Indeed, it is an irony that overinvestment in land and building in JMR by a few national big national developers has given advantaged to only a small group of rich people, but the nation as a whole should shoulder the severe impacts of economic turmoil which has resulted from such an overinvestment. Nevertheless, there are sign in erly 2002 of improvement in the property business, if not a recovery. This is shown by the increase of house sales and of building and land price in some new towns in JMR.

Demand for New Towns in JMR

The need for housing for the middle and upper income groups in large cities in Indonesia are growing rapidly. Many Chinese conglomerates, such as Salim Group, Eka Cipta Wijaya (Sinar Mas) Group, Lippo Group and Ciputra Group have been able to take advantage of this by developing new residential areas in JMR. As a result, many of family of middle and upper income groups have moved to new towns in JMR. Nevertheless, as Heikila (1998) argues, the development of new towns in JMR as well as other large cities in Indonesia basically reflects a grand mismatch between supply and demand for housing in the past. Many large developers have built luxurious houses of international standard (p.5) on the outskirts of JMR which were not demanded by the real housing market in the city.

The demand for luxury houses in JMR during the early and mid-1990 was driven by speculative purposes. Speculators bought houses expecting a rise in prices when they resold them. Many newly built luxury houses in the new town are unoccupied and were bought not for owner-occupation but for speculative purposes or low-risk investment, since the land prices in the new town increased rapidly (Firman, 1997). This resulted in over-supply of luxury houses in JMR during the 1990s. On the whole, the property development in JMR until the mid-1990s had been characterized by over-building, which is one of the contributors to the economic crisis in Indonesia (see also Winarso and Firman, 2002).

There are push and pull factors encouraging people to move to new towns in JMR (Leisch, 2000b): the push factors include space limitation in Jakarta city, congestion and pollution in the city center, whereas pull factors include better living environment, infrastructure and more reliable security offered in the new towns. Other primary reasons for residents to buy houses and to move to the new towns include closeness to Jakarta City, since most of the residents worked in the city, and the availability of urban amenities. Indeed, the need of middle-and upper-income group of JMR for security has provided market opportunities for new town developers (see also Dick and Rimmer, 1998, p.2317). Meanwhile, the physical design of new towns in JMR very much resemble the design of residential areas in developed countries, notably the US, and many are indeed planned and designed by expatriate architects, urban planners and property specialists hired by the local developers (see also Dick and Rimmer, 1998), even though they have little knowledge about local architecture and city planing⁶).

One of the JMR new towns is Bumi Serpong Damai, a block of 6 000 hectares of marginal land in the rolling hill, located about 13 kilometers west of Jakarta City. This new town, which has won several international and national prizes and awards, is even equipped with a 18 holes golf course, i.e. Damai Indah Golf and Country Club designed by Jack Nicklaus, a famous golf course designer. Just recently, in this new town, two higher education institution have been built: a Swiss-German University (SGU) employing expatriate as well as domestic faculty members, offering undergraduate and masters' degrees in Business Administration and Computer Technology, and a music college. Moreover, Bumi Serpong Damai also has an integrated business district ('Kawasan Niaga Terpadu') equipped with modern high technology facilities and infrastructure. Bumi Serpong Damai is planned to become a Cyber City, equipped with a Techno-Park. From 1989 to end of 1999, as much as 1 400 hectares of land out of the total area of 6 000 hectares had been built in this new town (Taman Tekno BSD: www.bsdcity.com). In addition, the BSD developer is now selling plots of land (Kaveling Siap Bangun) on which buyers could build a house of their own design, a practice which was not allowed by the National Land Agency (BPN) before, as it tends to become a speculative land business, instead of new town development. New residential area clusters in Bumi Serpong Damai (BSD) new town, which is called 'Internasional Kota Mandiri' ('International Self-contained Town') consists of Taman Edelweiss (Edelweiss Park), Taman Fortuna (Fortune Park) and Taman Chrysant (Chrysant park), which are obviously not local in origin. Meanwhile, in Lippo Karawaci new town, Pelita Harapan University, has operated higher educational facilities similar to best university in developed countries.

Similarly, the new town of Cikarang Baru (Table 1) is designed with road system with a right of way of 20 to 50 meters, including landscaping and street lighting. Telecommunication is provided for 5000 units and electricity is provided with a capacity of 228 MW. Since Cikarang Baru is integrated with industrial estate Jababeka, there are planned water treatment plants to supply clean water with a capacity of 26.5 thousand cu. meter per day, and a wastewater treatment plant with a capacity of 18 thousand cu. meter per day. Moreover, the city is also equipped with a country club and a 18 holes golf course designed by Nick Faldo, another world class golf course designer.

For commercial purpose, villa and houses in Kota Bunga (Flower City) in 'Jalur Puncak' (Puncak Strip), south of Bogor, are given foreign names, such as Villa Victoria, Villa Inggris (English Villa), Villa Venezuela, Villa Orlando, Villa Alpen and so on. Most of the houses in this area are only occupied during weekends. Even worse, this new town has apparently violated the spatial plan for the area, as it was built in a conservation area which functions as water catchment area. In fact, the housing development in this area is suspected of having contributed significantly to severe flooding in Jakarta City in early 2002, which cause the government then to freeze the new town and housing development in JMR for six months, starting in February 2002, and to evaluate the spatial new town's development plan in the area.

Another new town, Royal Sentul (Table 1) is provided with recreational park, Taman Fantasia, with facilities for indoor and outdoor games, including mini jet, sky cycle and slip cars and bumper cars, an 18-holes golf course, and polo and equestrian areas. Other provided facilities include business park, trade center, shopping mall and hospitals. The new town is designed by Kalges Carter Vail & Partner, from California, and is planned to occupy area of 2,740 hectares in a hilly area 200 to 600 meter above sea level. Houses in this new town are designed according to classical European, countrywood, Andalusia, Mediteranian, and Japanese style (Properti Indonesia, November 2002).

A study on characteristics of residents of Bumi Serpong Damai and Lippo Karawaci new towns (Leisch, 2002) has shown that there are two main reasons for residents, who are mostly new middle and upper class young couples with up to two children, of Indonesia-Chinese descent, to live in these new towns: security and lifestyle (see also Hogan and Houston, 2001). Indeed, security is the first priority for them. Many of the new land development projects in JMR, including these new towns, are gated with effective security measures. As Leisch (2000b) argues that the structure of these two new towns reflect the separation of society with respect to classes:

This core of the [Lippo Karawaci] town is surrounded by circles of housing areas with falling prizes according to growing distance from the centre...The architecture style in the housing areas varies and is sometimes reflected in the name of the neighbourhood, e.g. Taman Osaka for Japanese style, Taman Boston for American style, Taman

Holandia (under development) for Dutch style, Taman Paris and so on. However, the architecture does not really reflect the country's style rather than represent a modern American style with the flair of another region or country (p.4).

The development of Lippo Karawaci new town was started in 1993, including the infrastructure, such as electricity, water supply, telephone networks, sewerage systems and even cable TV; commercial and social facilities, including schools, hospitals, hotels, offices, shopping mall, recreational and cultural center, under integrated urban management. One of the last created western-styled subdivisions in Lippo Karawaci is 'Taman Spain,' (Spain Park) which was considered as the 'masterpiece' of Lippo Karawaci at the end of 2001. In the near future the Lippo Karawaci developer, a holder of ISO 9001 certificate, will develop eight new clusters, consisting of 130 to 140 middle and luxury housing units. In addition, there are two Business Parks in this new town, which consists of office buildings, high rise condominium/apartments, malls, hospitals and hotels. There are currently about 30,000 residents living in array of theme-based estates in this new town (Hogan and Houston, 2001, p.4). One could find that many of houses in Lippo Karawaci are unoccupied, with those who bought at the time the plan was presented now trying to re-sell them (Loveard, 1996). Nevertheless, the sale of houses in Lippo Karawaci increased from Rp. 155.7 billion (US \$ 15.57 million) in 2001 to 165.5 billion (US 16.55 million) in 2002.

Likewise, the Ciputra Group, the developer of Bumi Serpong Damai New Town, in their another new town project, i.e., Citra (Table 1), was able to increase the sale of houses from Rp. 238.2 billion (US \$ 23.82 million) in 2001 to Rp. 301.6 billion (US \$ 30.16 million) in 2002 (Kompas, 3 December 2002), reflecting the development of this new town. In short, The demand for new towns in JMR has been essentially created by developers who were able to build an image of new towns as a symbol of 'modernism.' The developers of these new towns have tried to create an image if the new towns they develop which are similar to residential areas in western countries⁷).

The Reinforcement of Spatial Segregation

Spatial segregation is not a new phenomenon in JMR, nor in other major cities in Indonesia. In colonial cities in Southeast Asia, including Jakarta City, residential areas have always separated the indigenous people and the Europeans (see Abayesekere, 1987; Leaf, 1996; Leisch, 2002). Nevertheless, recent new town development have apparently reinforced the spatial segregation in JMR in two respects. First, it has polarized middle-and upper-income groups of JMR residents, resulting in several pockets of exclusive residential areas and new towns in which the residents enjoyed an exclusive lifestyle, with high security and much better infrastructures and facilities⁸). In Lippo Karawaci new town (Table 1), for instance, there are number of families with monthly income more than Rp. 25 million (US \$2500: Leisch, 2002), which is quite high by Indonesian standard. In contrast, many neighborhood in the city are basically 'Kampung', that is, simply slum areas where poor live together, with an altogether different life-style. The 'Kampung' involves the practice the shared poverty and combining resources they have in order to survive (Evers, 1989). Ironically, many 'Kampungs' in the Jakarta Central Business District had been demolished providing sites for new luxury buildings, including hotels, offices, condominium and shopping malls (see also Jellinek, 1991).

The industrial and business activities which have been growing rapidly in JMR, have recently induced a great demand for housing for managers and professionals of the middle and upper class, as well as for low level workers. For young families of professional middle and upper class, including the wealthy Indonesian-Chinese, living in a 'self-contained city' (Kota Mandiri) has become an ideal way of living (see also Hogan and Houston, 2001, p.11-12). They feel comfortable with reliable security system and good living environment and infrastructure, far from congestion and pollution of Jakarta City center, just like a neighborhood in the suburbs of Los Angeles City in California or other western cities. As Dick and Rimmer (1998) argue:

In Indonesia [...] racial antagonism between the Chinese and Indonesian [...] encouraged wealthy Chinese to seek the security of gated communities [...] However, more and more middle-class indigenous Indonesian, [...] are also choosing to live in such secure communities, primarily to protect their property against theft. As people acquire more private possessions, their level of insecurity rises [...] Gated residential communities[...] are the present and futureworld of the insecure middle

class [in Indonesia...] Middle class people, therefore, seek to control their environment by insulating themselves from the uncertainties of casual social interaction with the poor (p.2317).

The second way these developments have enforced social segregation is within the new town themselves, where there have been segregation in which the upper middle class and lower high class occupy a part of the area which is exclusively designed to the highest security possible. In Bumi Serpong Damai new town for instance, by end of 1999 the developer had built almost 14 000 housing units which consisted of 8.3% luxury houses; 27.1% medium type houses; and 64.6% small type houses, located at different zones in the new town (www.bsdcity.com), including the luxury houses which were built in a zone which is provided with high security system. The internal segregation in Bumi Serpong Damai and other new towns in JMR are also clearly reflected in the different prices of land and buildings of different size and located in different zone (Table 2 and 3). The largest houses and land in Bumi Serpong Damai, for instance, cost almost 10 times that of the smallest ones. Meanwhile in Bintaro Jaya the difference almost reaches 20 times (Table 3). The developers invited only very selective people to buy land and buildings in parts of new town area, such as in Lippo Karawaci. As Leisch (2000) describes:

The chairman of the Lippo Group and his family live on an artificial island on the golf course. His family can decide who can live in this exclusive part of town, since the land there can only be bought by invitation (p.4).

As Hogan and Houston (2001) also mention:

The house of James Riady [the owner of Lippo Group Companies] is on the island at the middle of the lake, [which is also acts as the drainage system for the city], symbolizing the company's commitment to the project but also consciously or otherwise, echoing the traditional symbolism of Javanese sultanate and Chinese emperor systems of authority (p. 4).

In Lippo Cikarang, another new town developed by the Lippo Group, there are variety of housing styles and sizes, from luxurious and expensive condominiums to other modest rows of terraces to dormitory housing for workers who work in Delta Silicon Industrial Park located in this new town (Hogan and Houston, 2001, p.5), reflecting spatial segregation within the new town.

Table 2

Housing Zone in Bumi Serpong Damai (BSD) New Town

No.	Zone	Size (sq. meter)	
		Smallest B/L	Largest B/L
1.	Taman Edelweis	174/300	203/375
2.	Taman Giri Loka	194/301	243/375
3.	Taman Fortuna	161/204	241/351
4.	Puspita Loka	131/180	210/240
5.	Anggrek Loka	83/150	96/150
6.	Nusa Loka	36/72	88/180
7.	Kencana Loka	40/84	91/200

Source : Adapted from Properti Indonesia, January 2001, p.60

Note : B = Building L = Land

Table 3Housing and Land Prices in Some New Towns in
Jakarta Metropolitan Area, 2002

No.	New Town (Table 1)	Smallest Size (B/L)*	Price (in million Rp)	Largest Size (B/L)	Price (in Million Rp)
1.	Alam Sutera	159/200	450	265/480	1050
2.	Bumi Serpong Damai	36/72	122	243/375	1000
3.	Cikarang Baru	21/75	29.8	80/288	240
4.	Royal Sentul	33/72	120	100/300	500
5.	Gading Serpong	36/72	44.5	113/250	500
6.	Bintaro Jaya	25/72	101.7	265/400	1322
7.	Kota Modern	45/72	157	265/350	1009

Source : Properti Indonesia, October and December 2002

There is very little interaction among residents of various social groups within the new towns. Likewise, the residents use different community facilities for their own needs. As Leaf (1996) correctly points out, housing enclaves in the fringes of JMR are typically accessed through guarded gates, and serviced by controlled high standard facilities provided by the developers, which could include super-mall, golf-courses, and private schools (see also Leisch, 2000a). Young (1999, p.70 in Hogan and Houston, 2001, p.9) labels the new town as 'academic in consumerism for the new middle class.'

The trend is not only for newtowns in the outskirts of JMR, but also in the Jakarta City center, i.e. new-town-in-town, as shown in Blossom Residences, which is being built in Jakarta Pusat (Central Jakarta). The area is only three hectares in size, in which only 55 exclusive three-storey housing units will be built, on lots ranging from 195 to 823 sq. meter in size. There are three building types, including, deluxe (506 sq meter); deluxe corner (569 sq meter); and royal corner (569 sq meter). Each house will be equipped with a garage which can accommodate up to five cars. This new-town-in-town will have a 24 hours, around the clock, security system using a closed circuit TV and infrared sensor. The area will have exclusive facilities, including a club house, swimming pool, tennis court, fitness center, restaurants and playing fields for children. The house in this new town will cost from Rp. 3.5 to 7.0 billion (US \$ 350,000 to 700,000: Properti Indonesia, December 2002).

The government actually requires private developers of new towns and large-scale residential areas to build houses in the formula 1:3:6, that is, for every single luxury house built, the developers are required to build three modest and six low-cost houses, respectively, at the same location, in order to subsidize low-cost housing construction. However, this regulation has never been enforced or has been loosely interpreted so that low cost-houses can be built at an unfavourable locations or even simply postponed indefinitely (Dijkgraaf, 2000, p.3; see also Cowherd, 2000).

Nevertheless, security is less effective in JMR new towns when there are massive riots, such as in May 1998. During the riots, the Super Mall in Lippo Karawaci was destroyed by arson and looting. In several new residential areas in JMR, property of Indonesian-Chinese descent was target of mobs and was looted and burned during the riots. Many of them left their houses and other properties, seeking for security and safety in other places both in Indonesia or foreign countries, most notably Singapore and Australia. Although one cause of the riots was economic and political scapegoating of the ethnic Chinese who control a disproportionate share of the economy in Indonesia, in addition the riots were basically rooted the recent impoverished socio-economic conditions of the urban poor in the city, which is clearly reflected in residential spatial segregation in the city.

The social consequences of exclusive new town development in JMR have to be borne out by the community as a whole, notably the community in the new towns themselves, but this seems not to change the image of new towns as a symbol of 'modernism', security, and lifestyle. The fact is that in land prices in Pantai Indak Kapuk (Table 1) after the May 1998 riots dropped from Rp. 1.3 million to Rp. 700 thousand per sq. meter, since the area was one of the targets of the riot. Nevertheless, the drop had been only for the short-term period, as by the end of 2001, the land price went up to Rp. 2.5 million to Rp. 5 million per sq. meter (Properti Indonesia, October 2002). This basically suggests that if the authority can guarantee security, then many of middle- and high-income people would prefer to live or to invest in the new towns. It also indicates that for the middle- and high-income groups, the economic crisis does not seem to have halted their preference of buying houses in new town areas.

Another indication of the growing land and housing business several new town developments in JMR by mid-2002 is the increasing number of property brokers. In Lippo Karawaci (Table 1) for instance, an official realtor has been recently established through a cooperation between the developer and five property brokers in the area, including Ray White, the largest property brokers operated in the cities in Indonesia. The fact that the property transaction in Lippo Karawaci in 2002 reached Rp. 20 billion (US \$ 2 million) per month, in addition to secondary property market transaction in the area, which reached Rp. 45 to 75 billion (US \$ 4.5 million to US \$ 7.5 million) per month (Jurnal Properti, October 2002, p.8).

A factor which indicates the trend of spatial segregation in JMR is the management of new town development. Quite distinct from city administration in general, in which urban development management is run by the City Hall, in several new town maintenance of infrastructure and facilities is managed by the private developers exclusively, not allowing people from outside the new town areas to use the facilities. In Lippo Karawaci new town, for instance, the management is under a town manager, who is an expatriate employed by the developer company, instead of elected by the residents. From the company point of view, town management is very important in order to maintain good quality of life in the new town, which is the attractive factor for the consumers. As a

matter of fact, the local government has almost never involved, let alone interfered with the new town management in JMR. Indeed, not many new town development projects in JMR can afford to run such a private town development management. As Gordon Benton who is the town planner and manager of this new town (1999, in Hogan and Houston, 2001, p.4) describes:

[Lippo Karawaci] is the only township throughout the nation to have drinking water from the tap, municipally-treated central sewerage system, all services underground, hierarchical and traffic calmed street design, and [...] a town management (Benton, 1999, p.18).

With this trend in mind, the question to address is would new town and subdivision development in JMR continue or change in the near future? The answer is that as long as demand for better security for living environment is there, and the public security system, notably the policy system cannot guarantee it, this trend will continue. In fact, security may become a 'commodity' that developers could offer to a particular segment of societies, notably the middle- and upper-class, and indeed it would become a prime attractive factors for them to live in an exclusive new town. Given the built image of new town, there is a trend that should the economy recover in the near future, the business of new town development could develop again. At the end-2002, Delta Mas, another large new town project in Bekasi, JMR, which will occupy land of 3,000 hectares, was launched. This project is developed by a consortium involving, Sinar Mas business group from Indonesia, and Itochu and Nissho Iwai groups from Japan. Moreover, some smaller scale new town development in JMR have been recently launched, including Perumahan Cendekia (31 hectares) in Bekasi and Royal Serpong Village (14 hectares) in Serpong. The smaller planned new towns are designed with one gated system to maximize security system (Properti Indonesia, November 2002).

In short, the better new town security system that the developers could provide, the more attractive the new town would be to the consumers. It suggests that the spatial segregation will continue in JMR.

Summary and Conclusions

The most recent new town development in the periphery of JMR during the 1980s and 1990s had been largely induced by land speculative

undertaking by several private developers and uncontrolled land permits granted by the National Land Agency (BPN) for housing development in the area. It also essentially reflects the integration of JMR into the global economy (see Firman, 1998 and 1999). These new towns are mostly made up of low density, single-family houses, and exclusive residential areas for middle- and upper-income groups. The physical design of many JMR new towns resembles design of residential areas in advanced countries, notably the US, and many are indeed designed and planned by expatriate architects and urban planners, whom have little knowledge about local city planning, architecture and culture. New town development projects have been scattered throughout JMR, but there are no links from one to another, and even violate land use plans for the area in which they are located.

There have been several major actors involved in new town development in JMR. First, there are the developers who seek to extract as much as financial profits as possible out of land businesses in the area. They bought cheap land from the landowners and then sold it at considerably higher prices to the consumers; Second, both domestic and international financial institution, which had made investment funds easily available to developers. Many national and private banks in Indonesia have overextended themselves in providing loans to developers which have strong ties or are affiliated with the banks; Third, the central and local government, notably the National Land Agency (BPN), have facilitated land acquisition by developers through the land permit systems; Fourth, the consumers of the middle- and upper-income groups who have bought houses and land in the new town areas to be occupied or just for investment expecting profits from increasing land prices; Fifth, the landowners who are basically victims of the new town developments, as they have no right to sell their land to other than the approved developers, once the National Land Agency granted a land development permit (ijin lokasi) to the developers. As Leaf (1994) correctly points out, the development of enclave housing and new towns in the periphery of JMR in the 1990s was an outcome of interactions between market forces and the government policy (p. 342), but the developers had been able to take great advantages of this process, most notably the financial profits.

In the light of various issues of new town development in JMR, including social dualism (Cowherd, 2000), structures and functions (Leisch, 2000b), and gated communities (Hogan and Houston, 2001; Leisch, 2002), the present study has taken a different perspective, that is, by looking at new town development in JMR explicitly as a spatial segregation phenomenon in the city.

The demand for new towns in JMR has been essentially created by innovative developers who were able to build and sell an image of new towns as a symbol of 'modernism,' as in developed societies. This in turn has reinforced spatial segregation in JMR in three ways: First, it has polarized middle- and upper-income groups of JMR residents into the new towns, resulting in scattered pockets of exclusive residential areas in which the residents enjoyed an exclusive lifestyle, much better infrastructures and facilities and most of all, the security. Indeed, security is one of the attractive factors of people of upper-income groups to move and live in the new towns in JMR. Second, within the new towns themselves, the upper-middle class and high-class occupied part of the area which is exclusively designed to the highest security possible. Referring to Falah's (1996) typology of segregation, the spatial segregation in JMR could be categorized as belonging to 'self segregation,' or 'voluntary spatial segregation' (Greenstein et al, 2000; see also UNCHS, 2002), in that the middle-and upper-class establish residential environment for themselves for security and 'exclusive' life style purposes. Third, in several new towns, urban development management is carried out by the private developers instead of by the City Hall. The process of spatial segregation in JMR is essentially similar to the gated communities formation in Latin America megacities, as described by Coy and Pohler (2002) as 'island of wealth in an ocean of poverty' (p.358).

To some extent, segregation is a normal part of urban development, but new town development projects in JMR have apparently polarized middle- and upper-income groups to live in the new towns. In fact, several new towns in JMR have become enclaves in their own respect. Many of JMR new town residents do not want to live in culturally and socially mixed areas, such as in Kampung, for security reasons. Actually, the government has imposed a regulation that developers who build one luxury house are required to build three medium-level houses and six low-

cost houses in order to result in a mixed community development, but most of the JMR new town developers have simply neglected and loosely interpreted it, as it was against the market forces.

The 1998 Jakarta riots have shown how vulnerable the gated new towns are to mob, as many new residential areas in the city in which number of richer family live, especially the Indonesian-Chinese families, were a target of the mobs. The riots have been basically rooted the recent impoverished socio-economic condition of the urban poor in the city, which is clearly reflected in urban residential segregation in the city, although there might also have been some political and racial issues involved in it. This suggests that security would be a very important element that middle- and upper-class-income group look for in living environment in JMR. Indeed it may become a prime attractive factor for new town development business in the near future. In fact, the better and stronger the security system that the developers could make available to the residents, the more attractive the new town could become to the consumers. The sales of luxury housing and land in the new town which were destroyed during the 1998 riot, such as Lippo Karawaci, is increasing at present, reflecting the growing demand. This implies that spatial segregation will continue, and it seems inevitable as it is a product of socio-economic and political condition of the society as a whole.

Notes:

- 1) According to Phillips and Yeh (1987), new towns in East Asia can be classified as those which are 'independent' and 'freestanding', referring to new towns that are developed separately from a large city, and those which are a continuation of built-up areas of a large city, emphasizing functional unity of an urban area, respectively (p.5).
- 2) Studies of residential segregation in JMR should examine the extent to which 'Kampung' is distinct from new towns with respect to socio-economic and physical condition and mechanism to enforce the condition, but this study will focus more on town developments and its impact on spatial segregation.
- 3) Jellinek (1991) has extensively discussed the contrast between communities living in Kampung and those living in new developed areas in Jakarta City.
- 4) Until recently many Asian countries, including Indonesia, are still badly suffering from a severe economic crisis which had its origin in the mismanagement of short-term macroeconomic policy (see Garnaut, 1998), although there have been signs of recovery recently. The economic crisis in Indonesia has been in particular caused by the unhedged and short-term offshore bad debt of Indonesia's private enterprises (McLeod, 1997), and bad banking system, in which many national private banks were overextended in providing loans to persons and firms that are affiliated to the banks.
- 5) As Archer (1993) argues, the land development permit system could actually play several roles in urban land development: (1) to guide the location of private land and building development projects; (2) to coordinate the government and private sector development activities; (3) to facilitate land assembly for large-scale development projects, such as new towns and industrial estate development (p.39). However, the land development permit system in Indonesia has been abused for speculative land trading so that the above potential role of the system does not really function.

In order to acquire land for residential, industrial and tourist-resort development, developers or investors should first make a request for investment clearance (ijin prinsip) from Investment Coordinating Board (BKPM) which check if the proposed investment is not on the negative list. Once the developers hold a clearance, they may apply for land development permits to the National Land Agency (BPN) whose tasks are to manage land records, to process land title and to administer permits for land development. The land development permits are valid for one year, but can be renewed for additional one year, provided that the developers have been able to acquire the land at least one-fourth of the required land area. However, a number of land development permits had been granted to developers who have little or no intention of developing most or all of the areas (Arcadis Euroconsult, 1999, 4.8).

- 6) Dick and Rimmer (1998, p.2318) discuss how new town big developers in JMR have hired planners, design consultants, managers and advisers, property specialists and architects from the US and other developed countries, which in turn leads to cultural and social dissonance with the rest of the city.
- 7) In a wider context, Leaf (1994) strongly argues:

Jakarta's housing and land development policies have heretofore based upon the assumptions of orthodox development theory. This perspective holds a vision of the developing countries of the world, including Indonesia rising to the same or similar levels of economic development as the current developed countries. Accordingly, the trappings and lifestyles of Western urbanization are to be transferred along with the industries and institutions. Suburbanization is but one element [...] (p.354).

- 8) Lippo Karawaci new town developer, for instance, considers security and privacy as the most important aspect in its business, as they state:

It's our intention to put security as a top priority task/job, we always do research to find the best system that exceed or meets the global standard practice. There is no security system that 100% guaranteed, so we will continue to improve the system continuously
(www.lippokarawaci.co.id/Privacy.htm).

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