# SPATIAL PATTERN OF TWO ASIAN METROPOLITANS
## -Comparative study between Tokyo Metropolitan and Jabotabek Region-

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Pattern of city growth and urban development in Asia in many aspects are similar to those in other part of the world. In Asia however, the demographic magnitude of urban transformation is unusual, due to a rapidly expanding urban systems arising within densely populated countryside. This trend has been driven by economic expansion and has resulted in extended areas of mixed land use on city peripheries. A distinctive Asian variation of the usual pattern of suburbanization, so called as *desakota* region, encompasses both the city itself, with typical urban land use and associated compact and densely settled on sprawling areas that are closely enmeshed with the urban economy. During this process, the countryside is urbanized without the hinterland population necessarily moving into the city. Rural economics and lifestyles become submerged under the expansion of urban economic activity and culture, but do not disappear altogether. This idea of *desakota* seeks to identify characteristic regions of Asia that are neither urban nor rural, and to combine some of the features of both types of region into a continuously changing symbiotic relationship.

The urbanization as a general physical phenomenon in Indonesia is still recent. In 1930 only 75% of the total population lived in cities and towns. The urban growth in Indonesia increased after World War II, mainly caused by the push factor of the in security in the rural areas. In 1961, 15% of the Indonesian population lived in cities and towns. Since the last three decades, there have been some interesting and not always anticipated shifts in urbanization patterns. Indonesia's annual urban population growth rate dropped from 3,0% per annum between 1971 and 1980 to 2,6% per annum between 1980 and 1990. The growth rate of Indonesia's largest city, Jakarta, has also slowed down somewhat. Between 1971 and 1980 it grew at 3,9% per annum, but between 1980 and 1990 this had fallen to 2,4% per annum. However these mean that growth rate of the urban population within the boundaries of Jakarta has slowed, a lot of the new growth is concentrated just outside the boundaries of the city. The development of Jakarta's suburbs is the result of the suburbanization process, especially through the expansion of new housing and industrial areas.

The population of Japan is heavily concentrated in several cities, with about 12 million unhabitats in Tokyo and its suburbs. A great number of people have continued to flow into urban areas, especially into metropolitan areas, since the rapid growth era of the Japanese economy in the 1960's, the population of three metropolitan areas, namely the Tokyo, Nagoya and Osaka regions, increased by 10 million from 48,3 million to 58,5 million in the period between 1970 and 1985. Together, these three regions accounted for nearly 50% of the total Japanese population. The rapid growth of Japanese economy has encouraged demands for urban land since 1960's. The trend in land use conversions reached its peak in the early 1970's and again of the early

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1980's. The rapid suburbanization fueled an increase in land prices and created a mixed land use between urban uses (housing and industry) and agricultural uses.

For some extent, the suburbanization processes in Japan's largest cities have some similarities with suburbanization of Indonesia's largest cities, especially in Java Island. The suburbs are complex entity with mixed land use pattern, direct contact between migrants from city and farmers, therefore urban-rural dichotomy is not much relevant any more.

The study focuses to contrast some significant development characteristics of two Asian metropolitans compared to other urbanization process in the world. For that purpose, the study examines the spatial dynamics of urban development of Jakarta Metropolitan, called as Jabotabek Region and Tokyo Metropolitan in 1990.

Being significantly different from the urbanization and suburbanization in USA and Europe, the continuing outward expansion of Tokyo Metropolitan and Jabotabek Region have not only some similarity in many aspects of urban development spatial pattern, but also showed some significant differences. Both metropolitans have similar in their trend to be the primate cities of countries whereas the urban systems arising with densely population, mixed land uses and mixed economic activities of the inhabitants in their suburb. On the other hand, agriculture land uses, especially rice fields areas and the spread of farming households in the suburbs are still significant but spatially distributed in a different pattern.

In 1990, Tokyo and Jakarta metropolitans are very different in their magnitudes on the sizes of their population, areas and economic productivity. In 1990, Jakarta City had population of about 7.11 million, while Tokyo City had a population of 11.37 million. The population density of Jakarta City was 10 700 people/$km^2$, while Tokyo City was about its half, 5 500 people/$km^2$. The population and urban activities distribution of Tokyo Metropolitan was more dispersed than Jabotabek Region.

Spatial polarization of economic activities of Jabotabek region makes contrast the city's core with its surrounding areas in Jabotabek Region. Urban development of Jabotabek Region tends to form a concentric spatial distribution of land use and socioeconomic aspects. The core of Jabotabek Region is highly predominated by manufacture and services activities and it has been surrounded by highly mixed land use urban fringe and the most remote areas predominated by agricultural land uses and farmers settlement areas. On the other hand, Tokyo Metropolitan characterized by its highly density populated core, which also predominated by secondary and tertiary economics activities but it was surrounded by very complex urbanized areas, which were characterized by mixed land uses and mixed economic activities.

Mixed land use in Tokyo metropolitan for some extent can be seen as their socio-economics independency to the city center. The Tokyo city's surrounding areas have been developed as very complex entity in term of mixed economic sectors and spatial distribution Tokyo metropolitan shows a lower rate of population gradient compare to Jabotabek Region means that the metropolitan has been developed with a leser concentrated manner and better accessibility rate of the suburbs to the city's center.

The Jabotabek Region tends to develop in a different manner, the mixed-land use seemed to be distributed separation and independently with occupation mixture. Meaning that the Jakarta suburbs develops to become more socially fragmented, the new urbanized areas tends to become urban enclaves and have no significant impact on the local socio-economic development. On the other hand, low accessibility rate of the suburb contrasts regional disparity and social polarization between metropolitan's

core and its peripheral. The core is concentration of the most productive sectors (manufacture and services) and the suburbs is dominated by less productive sector (primary sector).

The study significantly shows the phenomenon of high density population, mixed or complex entity of suburbanized areas of Tokyo and Jakarta metropolitans, but on the other hand the study contrasts the significant different on the structure of socio-economic spatial distribution. These differences imply on the structural development pattern and in the level of regional development disparity between center and its peripheral/suburbs