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Urban Design Guidelines as Tool for Tall Building in Jakarta

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Biography

Prasetyoadi, IAI, PIA is one of the Core Founder of Green Building Council Indonesia (www.gbcindonesia.org) and committee member of World Green Building Council Asia Pacific Network. In GBCI, he is responsible for the Council Development and liaison with World GBC and other GBCs around the world. He is Deputy to Chairman for International Relations of Green Building Council Indonesia. He is the director of PDW (www.pdw-architects.com), urban design and architecture consultant in Jakarta. He is also the Country Leader for CTBUH Indonesia that has just recently formed. He is a professional member of IAI (Ikatan Arsitek Indonesia), PIA (Planning Institute of Australia), IAP (Ikatan Ahli Perencanaan Indonesia), associate member of SIA (Singapore Institute of Architects) and LEAD (Leadership in Environment and Development) Fellow (www.lead.org).

Abstract

Indonesia has enjoyed property boom since late 1970s when the oil prices were rising exponentially. The city has grown extensively, unfortunately sprawling outside the city center.

Early 1990s, Urban Design Guidelines instrument is introduced in Jakarta brought by Prof. Danisworo. Since then, the guidelines have been part of the city planning instrument. Unfortunately, in 1997-1998, Indonesia hit by regional financial crisis, the property industry had suffered and on hold. After the financial and political crisis, Indonesia hit rock bottom and there is no way other than growing for the country to survive. Early 2000, Indonesia's economy was getting better and better and now after a decade, the country can survive the 2008 financial crisis and continue to grow.

The effect to the development is enormous, developers start building high rises and superblocks. The urban design guidelines are developed to control the building and also the design of the area, including share resources and other urban design futures. The paper will discuss the improvement of urban design guidelines since it first introduced and how it is evolved from building control tools to include sustainability measures. Further, it is now being used to control the development along the planned Mass Rapid Transport.

The writer has the experience to develop several urban design guidelines in Jakarta, one of the idealism is to create guidelines that can control the sprawl so cities in Indonesia become more compact and how tall building can contribute to the city landscape, providing people with a compact city living in Indonesia. There are cultural, economy and political issues to change the paradigm of urban development in Indonesia. The issue of environmental carrying capacity and sustainability are also becoming more important in the guidelines implementation.

Keywords: urban design, superblocks, development, sustainability

Jakarta, a Reformed City?

In 1998, Indonesia had its political and economic crisis; it is the worst since 1965-1966. After enjoying almost 25 years of rapid growth since the oil price crisis in 1975, the development has a short pause. During the reform period, there is a shift in balance of power, national government power reduced and shifted to local government with the new autonomy law of 1999. As a city, Jakarta is widely sprawled, its administration area covered 650 km², beyond the administration area, the population spread to other satellite cities around the Jakarta, the suburban area, where most people lived and the land is still cheap. The 1998 crisis is relatively short in term of property development as in 2001 the property started growing rapidly. The land cost in CBD area has been increasing 3 to 6 the price from early 2000s. The development is now in a new urban central across the city. There is a new development area in North and South Jakarta, elite suburban that is now turn into a new commercial strip.

The developments in Jakarta, until early 80s, have been predominantly low-rise, low to medium-density. It is considered that the land is still vast. With registered population almost 10 million people, Jakarta is burdened by the surrounding cities; people commute every day from the outskirts of Jakarta. As service city, Jakarta is at the moment is undesirable to live in as it is lack of security and safety. People still looks for suburban home model with landed house and the backyard. The result of suburban living model is the sprawl of larger metropolitan area. This creates burden in public infrastructure; especially transportation. Lack of (green) public open space is also become an important issue, from the target set by the government in their planning document of 13% green open space, there is only under 7% green public open space in Jakarta. Despite the rapid growth and development, most of the development doesn't take into account pedestrian; the design caters more towards (private) vehicle. As a city, Jakarta needs to become more 'compact', with the population dependencies and burden from larger metropolitan area, Jakarta needs a breakthrough, invest in more infrastructure in the city center and further increase the density of the downtown area.

Development & Environmental Issues

Today, Jakarta is a city of contrast, a blend between old and new, modernity and tradition, and, formal and informal ways of life. All co-exist side by side to form a built environment which reflects the dualism of its socio-cultural and economic forces.

The dualistic nature of the forces that work behind the process of formation of the built environment has made it difficult for the authority to regulate and to control. Although planning activity and building design and construction regulation had emerged since the colonial administration period, the practice of modern building design and construction is relatively new to most developing countries both in terms of the profession, regulations, and its acceptance within the context of the socio-political environment.

Furthermore the existing building and construction regulations and codes, which are clearly based on western theories and models, can cope with the problems and fit well, only within the context of the formal sector of the city, leaving most of the problems of the informal sector unresolved. This situation, coupled with the lack of experience in dealing with massive urbanization and development pressures, has forced the authorities to adopt planning policies and building design and construction regulations based on trial and error. Urban development in developing countries like in Indonesia, presents a multitude new problems which cannot be solved merely by the adoption of western methods.

Urban Design Guideline as Planning Tool

In 1990s, Prof. M. Danisworo introduced Urban Design Guidelines as planning tool for Jakarta. Urban design is both a process and an objective. It is a process by which the ultimate form of the future built environment is produced as the sum of many public and private decisions. Urban design as a process refers to the construction of the appearance, form, and relationships between buildings, open spaces and streetscapes. Those elements are intentionally controlled to create a desirable image and quality of life within the city (Figure 1). Nonetheless, socio cultural aspects should also be regarded equally as well as the functional needs of the dwellers. This is vital for countries such as Indonesia, with its socially unstable population and in its formative stage. In addition, urban design is an objective that comprises a set of qualities, namely visual, functional, and environmental qualities that has to be achieved through the process.

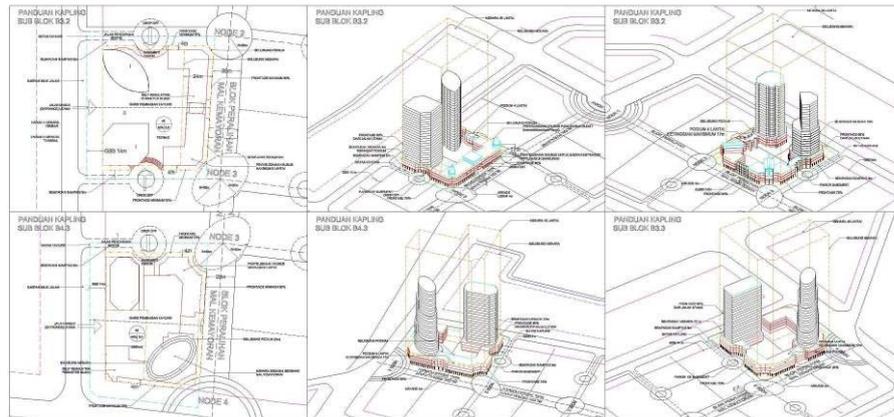


Figure 1: Urban Design Guidelines and Process

Similar to urban planning, urban design also concerns with the allocation or re-allocation of resources that implies to the relationship between different land uses, the capacity of the land and the infrastructure to support those uses. Urban design decision have a powerful impact on the shape of our built environment by determining levels of density, the nature and amount of mix uses as well as the traffic circulation patterns, both for pedestrians and vehicular transportation. While urban planning concerns with the two-dimensional aspect of the city, urban design concentrates in the three-dimensional aspect as a further translation of the two dimensional aspect that is previously mentioned. The client of urban design is the general public, the city inhabitants. Hence, urban designers attempt to guide the architects and contractors who will execute the actual design of individual buildings and other public areas as streets and parks.

There is a need of urban design guidelines to achieve the optimum built form of a large development projects such as super block, which will take between ten to fifteen years to develop. These guidelines function as development controls to ensure that all urban design elements are properly dealt in favor of the public needs. Consequently, the guidelines have to be clear and specific, in terms of detailed zoning regulations. This specificity, however, must not be rigid. Guidelines should provide ample room for innovations as well, to anticipate the future development in regards of the market forces during the project implementation. Therefore, there must be a review in a five-year term in order to adjust or amend for those significant changes.

Transformation of Urban Design Guidelines

In 2000s, the urban design guidelines that has been initiated earlier needs to be reviewed, as well as extended. With the urban design guidelines as development control, it is becoming more widely use to help the city improve its planning process and development. The guidelines, however, depends on the city ability to increase its carrying capacity. Jakarta's transportation system is slightly improved with the introduction of Transjakarta (Bus Rapid Transit) which now run in 10 corridors. However it hasn't solved the problem of daily traffic gridlock as the bus only runs within Jakarta's city limit and doesn't go further to larger metropolitan area. Jakarta is also planned to build mass rapid transit (MRT) that is scheduled to operate in 2016. Further, other infrastructures also need to improve to support Jakarta

as service city. The transformation of urban design guidelines need to accommodate and complement the improvement of infrastructure. Several urban design guidelines have already correlated and complement one and another. This will improve the built environment quality of the area.

The urban design guideline, as development control for superblock, creates an opportunity to increase the density while at the same time increasing the city's carrying capacity. The high density development will be controlled in the urban design guidelines with the increase and redistribution of development intensity in the area. This will provide more (green) open space and public facilities in the development area. The transformation of the guidelines rewards the development that contributes to city's infrastructure and reducing the development. The increase of development intensity will be given to the development that meets the criteria in the urban design guidelines that encourage, among others; provision for green open space, linkages and public facilities. The sustainability issue is also addressed more in the urban design guidelines review by the city planning authority. The development that meets green building criteria is also encouraged.

Concluding Remarks

The higher density development; not necessarily tall building; will help improve the environment quality in the city center. Tall building can be seen as a catalyst to increase the value of the property in the area. However, it should be controlled by the authority in which area the tall building could be erected. This will relates to the characteristic of a certain area and the infrastructure carrying capacity in the area.

Tall building is now becoming necessities. It needs not be super high-rise building in Jakarta, but definitely, more people needs to be accommodated in the city center to reduce traffic burden and city's infrastructure investment.

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