Green Open Spaces in Indonesian cities: schisms between law and practice

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Abstract: International organizations consider Green Open Spaces (GOSs) to be an indispensable asset for the health of urban inhabitants. Indonesian cities consist of about 9% of these spaces, even though the Law of Spatial Planning (SPL) 2007 of the Republic of Indonesia stipulates 30%. Massive cleavages are obvious between the international target of min. 9 m²/capita GOS, the adaptation and translation of it into the SPL 2007, and finally the real practice on the local level of increasing the amount of GOSs. The question follows: what are the challenges facing the realization of GOSs? Eighteen interviews have been conducted with representatives from the national government, local governments and NGOs in Jakarta, Yogyakarta and Semarang. In planning GOSs, a long-term is necessary but contrary to business interests and the short-term consumer preferences of the powerful modern middle-class. Nevertheless, examples of reducing the oppositions to the mandated regulations and requirements do exist.

Key words: Green Open Spaces, Law of Spatial Planning 2007, Indonesia

[Submitted as Field Note: 7 September 2013, Acceptance of the revised manuscript: 17 November 2013]

Whenever one thinks of Indonesian cities, one rarely associates them with vast amounts of open spaces, even less so with green open spaces (GOSs). Surprisingly, the Indonesian Law of Spatial Planning (SPL) 26/2007 stipulates that 30% of urban areas must consist of GOS. But where are they?

A former army base is getting converted into a city park: The case of Wonosari, Gunung Kidul (Province Yogyakarta

Introduction

Urban areas have become the focal spatial entities of emerging economies, not only regarding innovations but also rising ecological footprints. In Indonesia, the percentage of the urban population increased from 12.4% (1950) to 48.1% (2005). It is expected that in the year 2050, 58.5% will live in urban spaces (Vorlaufer, 2011: 86). Due to massive urbanization, questions of healthy living in urban areas have become more crucial for urban planning and management, especially for the 10 million (2012) urban poor (Badan Pusat Statistik, 2013). People with little access to basic resources will be the first to experience the negative effects of urbanization (UN Habitat, 2010:17).

International organizations like the United Nations (UN) and the World Health Organization (WHO) are focusing on healthy living conditions in urban areas (WHO 2008). Green Open Spaces include major features which contribute to the improvement of aesthetic conditions and numerous bioclimatic functions: reducing CO2 emissions and urban heat islands, serving as water regeneration and noise attenuator, acting as wind breakers, and also doubling as a habitat for animals. These possible functions have resulted in the mandate of min. 9 $m^2/capita$ or optimal 10 to 15 m²/capita GOS.

Those interviewed doubt that the Indonesian government would have become active without the involvement and pressure from international institutions. The Indonesian government adopted these policies and adapted them to the Indonesian case (DJPR, 2008; Arianti, 2010). The most ascribed function of GOSs in Indonesia is the provision of a decentralized flood system as conservation areas for hydrological sustainability and water control in runoff areas. Undoubtedly this can be regarded as one of the strongest pro-GOS arguments (Dewi, 2011). For example, the flood 2007 in Jakarta was "the greatest flood in the last three centuries, inundated about 40% of the city, killed 80 people and forced about 340.000 to flee" (Brinkmann & Hartmann, 2009: 2). The damage caused by natural disasters like floods, which occur with great frequency and severity, also cause more transformations of GOSs into commercial areas and soil-sealing.

Arguments for social benefits like



Flower pots to increase the aesthetics, Kebon Kacang, Jakarta

recreation or the importance of public spaces in democratic societies are less prominent (DJPR, 2008; Arianti, 2010). However, in many Indonesian cities, the current situation of GOSs is alarming: "In the big cities like Jakarta, Surabaya, Bandung, and Medan, GOS have decreased from 35 percent on average into less than 10 percent of today's condition" (Kirmanto et al., 2012: 4). Jakarta has only 7.1 m² GOS per capita. Indonesian cities fall far below the worldwide average of 11 m² to 34 m²/capita (ibid.). Jakarta's official population numbers 9.6 mil. people (2010) who live in an area of 661.52 km² (Badan Pusat Statistik, 2013). If everyone were to get the requested min. of 9 m²/capita, Jakarta would have to establish 2693 ha of additional green spaces. 30% GOS means min. 20 m²/capita in Jakarta.

In addition to measurable indicators, soft parameters like place, distribution and access should be considered. For example the 87 ha of Bogor's Botanical Garden in the city center bars many from access through an entrance fee. Distribution is also highly unequal, because barely any green areas exist in certain other neighborhoods. Also, GOSs in the urban periphery have almost no impact on living conditions in the inner city. Access depends on mobility and its costs.

Thus, several reasons have caused the national government to extend regulations for city development in 2007. They added a new section to the Indonesian Law of Spatial Planning, establishing a target of achieving 30% GOS share of the total urban administrative area (Kirmanto et al., 2012).

The main question of this research note focuses on discussing what problems can arise in realizing this ambitious goal. To understand the complexity of this topic, we look at the institutional framework related to GOSs. Furthermore eighteen semistructured interviews were arranged with representatives from the Ministry of Public Works, the local government of the City Wonosari, the Badan Lingkungan Hidup (BLH) Yogyakarta and several NGOs in Yogyakarta, Semarang and Jakarta. The interview partners belonged to the educated and politically active middle-class or hold official government positions and are consequently more reticent to express critical opinions to a foreigner. With this method, differences between law and real practice were revealed. The research was conducted between February and April 2013 while working for United Cities Local Government Asia Pacific (UCLG ASPAC), located in Jakarta.

The Institutional Framework

There have been various attempts to amend GOSs to adhere to the stipulations of the SPL 2007. The law clarifies how one of the most powerful instruments for implementing GOSs is designed: the institutional framework is mainly determined in the SPL 2007 and PEDOMAN (Penyediaan dan Pemanfaatan Ruang Terbuka Hijau di Kawasan Perkotaan = Preparation and Utilization of Green Open Space in Urban Areas). The goals of SPL 2007 must be fulfilled twenty years after the approval. Article 29 mentions that the 30% GOS in urban areas consist of properties which are 20% public and 10% private (DJPR, 2007). It was not stated how the amount of 30% was determined.

Open Spaces are defined as spaces in the city or the wider region that are either an elongated spot or lanes which are free of buildings and where use is more open. Open spaces consist of green open space (GOS) and non-green open space. Non-green Open Spaces are open spaces in urban areas which are not included in the category of green spaces; they are paved areas and water bodies. Private GOSs are owned by a particular institution or individuals and access to them is limited to others. It can be a garden or the courtyard of a house, public building or private planted land. Public GOSs, such as parks, streets, and areas such as riverbank greenery are owned and managed by local cities or counties for the benefit of everyone. The so-called Coefficient of Basic Buildings (CBB), defined as the percentage of first floor buildings to land area (DJPR, 2008), should be low to allow a high percentage of GOS. The land-use targets shall be related to the spatial distribution of the urban population (Fig. 1).

SPL encourages decentralization and more opportunities on the level of local governments (Dewi, 2011). In Indonesia, SPL 2007 follows a dual system of hierarchy and parallel planning. "A parallel system refers to the fact that each government unit possesses more or less similar authorities in spatial management, which creates the impression that districts have autonomy in

spatial management. In contrast, the hierarchical system indicates that district spatial planning is considered an elaboration of higher ranking spatial planning" (Moelino, 2011: 180). The framework used from spatial planning to implementing GOSs involves several steps. Aside from PEDOMAN, the agencies involved in spatial planning at the national, provincial, regency, and city levels have to determine the spatial plan in accordance with their abilities. The Spatial Plan has to give information about the minimum size of the area, the type and location for GOSs, the stages of implementation for the provision of GOSs, and its intended use more generally.

Furthermore, the Detailed Plan, created by the urban regions and cities, includes information about specific GOS provisions by type, location and dimension on a smaller scale (1:5000). The Detailed Plan determines tools and measurements for a five year plan, including the acquisition of existing GOSs, creating local strategies for long- and short-term objectives, and the evaluation of priority GOS areas. It indicates how to realize concepts in each area and city district and provides the zoning regulations (ibid.) (Fig. 2).

Experts judge the clause as a milestone because, compared to former laws, SPL 2007 includes the empowerment of people and gives citizens more rights to participate in the decision-making process. Spatial plans and construction projects must be published, so local people can object more easily if abuse is suspected. The people's point of view is reflec-



Fig. 1: Land-use targets in Indonesian cities according to SPL 2007 (CCB = Coefficient Basic Buildings)

ted more than in former laws. The law takes GOSs into consideration, which has never been done before. Sanctions will (theoretically) be enacted if the guidelines of the detailed plan are not implemented. Within the former legal framework, GOSs could easily be transformed into commercial or residential areas with no consequences.

Challenges in the Implementation

The next step is to look in to the practice of realizing GOSs. Several cities have achieved 30% of green space, but as mentioned in an interview, the practical definition of GOS is sometimes disparate from the official one in the law. Zoning separates GOSs from other green spaces like agricultural areas or roof top gardens. The law requires action, especially from the local governments. Sanctions in form of administrative fines threaten the local government as well as allegations from the civil population of failed city management policy. As mentioned in an interview, mayors are judged by their performance in the last legislative period, especially in context of economic stability, more so than by how they have kept up with long-term environmental standards. Consequently, most city governments lag behind the target increase of the share of GOS. However, these spaces are in competition with the interests of investors and land acquisition by city developers, who have built new towns like Kebayoran Baru in Jakarta. Such complexes of hotels, office buildings and other facilities are in competition with other new towns. The boost of mega projects since the 1980s (Rimmer&Dick, 2009) ends up courting customers and results in the transformation and decline of green areas. The interview partners expressed that local governments are not prevailing enough against the economic powers that force their hands. The government will ultimately define any green area as GOS.

An interviewee from the Ministry of Public Works affirms that since the new law has come into force, land transformation does not happen anymore, but "many local governments are in euphoria in claiming their resources with less consideration of public good" where GOS is included (Dewi, 2011: 24). The risk of being prosecuted rose with the legal empowerment of the people, however, instruments of control and sanctions are quite weak or nearly nonexistent.



City Park Taman Langsat with Wi-Fi, jogging trail and a cleaned-up canal

Corruption was named as a major reason for why transformations and the decline of GOSs are still happening. Questions of responsibilities regarding planning, controlling and managing GOSs are an additional challenge. In Jakarta, for example, three agencies charged with planning, managing and controlling exist side-by-side: the Park, Forest, and Agricultural Service. The fact that Jakarta is divided in six municipalities with their own agencies, visions and needs adds to the institutional fragmentation of human resources and coordination between institutions and funds (Hakim, 2007). Pacione (2009) calls this "absence of unified or coordinated governance structures" (ibid. 113) a typical attribute of Asian mega-urban regions like Jakarta.

GOS as a Non-urban Life Pattern

Interview partners expressed that having a green city is not actually sought after by urban inhabitants, who do not expect green in cities. It seems that modern Indonesian society does not associate greenery with the patterns of modern life. Scientists have identified the consumer society in Asian cities and also how its "promotion of lifestyles of leisure has become [...] defining characteristics in Indonesia" (Gerke 2002: 136). "They are consumers par excellence in pursuit of new lifestyles; they 'consume' media products, housing, cars, electrical and electronic ware, fashion and luxury goods, cuisine, entertainment, tourism and educational services" (King, 2008: 74). For the buying-class, consumption is part of everyday life, an element of status, a way of image construction and identity (ibid.). It thus seems as though there is no desire for more 'nature' in their lives. This consumerism symbolizes 'modernity' and urban lifestyles (Gerke, 2002: 136). The urban middleclass can live in gated communities and purchase "green" within them, but it does not lead to the required equal distribution of GOS and public accessibility. The number of people who are really able to participate in the middleclass lifestyle did not actually take part in consumerism; they did "lifestyling" (ibid.). This means that people who exhibit a middle-class lifestyle project symbols of wealth, and consume virtually instead of physically. As expressed in interviews, increasingly higher incomes, which can be seen as driver of cultural and political changes, are strictly discouraging the adaptation of rural values and customs. If the rural is opposed to the urban lifestyle, then rural citizens and their manner of food production are associated with low education, premodern routine, traditional values and less known for personal self-fulfillment. The Indonesian principle of Gotong Royong – mutual help – is an element of everyday rural life, combined with familiarity, a lack of individuality, and traditions. Greenery is mostly located in

rural areas, connected to agrarian production and does not fit into people's images of cities, which offer new lifestyle opportunities. Urban inhabitants do not use green spaces for recreational activities. They often participate in recreation in air-conditioned private sports parks located within their gated communities. These may be reasons why local urban political decision-makers, as a part of the modern middle-class, lack the desire to implement GOS. They also associate GOS with a rural lifestyle. At the same time, they are probably the people who are most concerned about it. As long as they get elected, they have to handle ecological topics to ensure the health of urban inhabitants. The mayor of Surabaya, a rare exception, is known for her green city policy. She has established several parks in the last few years.

Despite this, actions in several cities have expressed an ongoing debate about public spaces in general. Yogyakarta's huge street art community, for instance, has made public and private property a topic of mayoral debates. Many cities



Fig. 2 Framework from the idea to GOS

Source: Own display based on DJPR, 2008:

like Bogor, Bandung or Jakarta have also implemented car-free Sundays, when main roads are temporarily closed and the middle-class is encouraged to participate in recreation and spend time relaxing.

Flicker of Hope

While the awareness of GOSs and their benefits is low, some examples show ways that Indonesians have established GOSs anyway.

1. National Governments's Green City Program

The national government started projects that speak to the government's increasing awareness of green issues. The Ministry of Public Works wants to create a park culture including an annual Park Festival. They collected first experiences with the Taman Langsat (5.000 m²), Jakarta, where artists installed sculptures and art, Wi-Fi was accessible and children could join various actions.

Another program, which started in 2011, applies a comprehensive approach to promote urban sustainability by means of the so-called "eco-friendly city" initiative (Kirmanto et al., 2012: 6). A balance of economy, efficiency, ecological preservation and social justice are included in the "Program Pengembangan Kota Hijau" (P2KH 2011). It is based on eight interlocked attributes but focuses only on three: green community, green planning and design, and GOS. The Ministry is not responsible for others things like waste and water management. Since spatial planning is part of the responsibility of local governments, such programs have to collaborate with

them. Out of 491 regencies and municipalities, 112 (2013) have decided to join the program on a voluntary basis thereby fulfilling three previously defined criteria: strong leadership by the mayor, good performance in spatial planning, design and management, and a strong commitment to local environmental quality, which includes sharing the local budget, acquiring land for pilot projects and public participation (Kirmanto et al., 2012: 7). The budget of the program increased in recent years to 200 million USD in 2013 without any international donors. In the case of GOS, the participants have created a master plan that defines the amount of GOS. A GOS should have a minimum size of 5.000 m², be located in a strategic location, and function as a City Park. In 2015, it will be decided how the program continues. Then cities will be evaluated on their performance in various ways: the value of the GOS location, and how to replace the Ministry in financial responsibility through the inclusion of other stakeholders and budget sources. Depending on the result of the evaluation, the cancelation of the program can negatively affect local governments. With such pressure and limited financial resources, it is necessary to be responsive to the suggestions of the private sector. The program tries to protect the existing public GOSs and find new possible locations in public areas. The success on the local levels cannot be assessed now, but budget and the number of participants grew during the first period. In the following section, a project in Yogyakarta, a participant of the program,



Badran's attractive surroundings further enhanced by the project "Green Kampung"

will be explored as it represents one way that the requirements have been fulfilled.

2. Kampung Badran, Yogyakarta

Yogyakarta has already achieved 43.4% GOS (Brontowiyono et al., 2011). Of this, 17% is public and the rest is private, but the GOSs by definition consist of only 11.2% (ibid.). One project by Badan Lingkungan Hidup (BLH) Yogyakarta, which began just recently in 2012, particularly addresses the kampung (lit.: village) directly. BLH provides material valued at 1,000 USD for projects that consider environmental issues and integrate into the community. Kampung Badran, one participant, proposed project of "Green Kampung" to the BLH that includes waste management, GOS, and education programs.

The people in Badran have also planted trees in flower pots and planned an open space with a pool along the river bank. This has led to activities like garbage collection along the river. Before, the people did not face the river and used the current as waste disposal. The community is able to generate money with the harvest from planted fruit trees and this money can be reinvested in the expansion of the area and community needs. If projects take economic issues into consideration, they are able to gain more acceptance at the stakeholder level, because while arguments regarding potential climate change are not pressing for the local people, higher incomes would have an immediate effect. This example particularly involves the participatory and community development components of the SPL. Within the program, equal distribution of GOS and low barriers of access are encouraged.

3. Taman Kota Kebun Palem, Wonosari

The City Park Taman Kota Kebun Palem (1.7 ha) of Wonosari, Gunung Kidul (Prov. Yogyakarta) is an example of the local government implementing a GOS regardless of the costs for services, patrolling, or waste management. The NGO Javlec was involved in the process to convert the idle military site into a city park. They had to manage the negotiations between the stakeholders and to raise external funding. Finally, the Bank Negara Indonesia (BNI) committed itself to finance the project for the next five years. Thereby BNI voluntarily followed the governmental call for Corporate Social Responsibility (CSR), which postulates that the richest Indonesian companies should spend a certain amount of their revenue to social projects. This shall relieve financial pressure from local governments. In this case, a new GOS was added and made accessible to the public. However, CSR and the development of new green spaces might be controversially discussed (Cheung, 2012). For BNI presumed advantages are better public image and better relations to the local government.

Conclusion

International organizations and standards demand healthier living conditions for urban inhabitants. Health for urban inhabitants can be improved through various means, such as the implementation of GOSs with an optimum 15 m²/capita. Indonesia followed this mandate by encouraging GOS development in the SPL clause 26/2007, which clearly states that 30% of total urban area should be green. Only a few Indonesian cities have reached this share of green space, but this discrepancy reveals the schism between the ideal prospect established in the law and reality. The private sector, which can be included in establishing GOS, is powerful in Asian cities and exerts a strong influence in the globalized economy. Interest conflicts with the private sector inhibit changes for a greener city; their ventures often result in the transformation of GOS into mega-projects. Furthermore, corruption and a weak capacity to control,

regulate and manage the city and enforce laws must also be considered. For effectual urban planning, responsibilities must be consolidated among agencies and mayors. Additionally, control and sanctions have to be realized. As long as GOS is seen as an element of rural lifestyle, broader society will have no demand for it. This means that GOS will not become valued by the Indonesians and the implementation of the SPL will remain limited to the current level. Indonesian society is also learning what it means to have public areas that everyone can access, although the areas are not green at all. Everyone can benefit from Green Open Space, but that issue has to be emphasized n Indonesia overall and on every single level.

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> Car-free Sunday on one of Jakarta's main avenues between Thamrin Place and the National Monument