PROCEEDINGS
INTERNATIONAL CONFERENCE

Local Wisdom in Global Era
Enhancing the locality in Architecture, Housing and Urban Environment

21-22 JANUARY 2011
DUTA WACANA CHRISTIAN UNIVERSITY
YOGYAKARTA - INDONESIA

In Collaboration with:
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YOGYAKARTA - INDONESIA

Organised by:
Department of Architecture
Faculty of Architecture and Design
Duta Wacana Christian University

Sani Ro'chansyah
January 22, 2011
FOREWORD

It is an honour for Department of Architecture, Faculty of Architecture and Design, Duta Wacana Christian University (DWCU) at Yogyakarta, Indonesia; to be the host of CIB International Conference on Local Wisdom in Global Era. The Conference being run by the collaboration among Faculty of Architecture and Design DWCU, Institute of Technology 10 November Surabaya (ITS), International Council for Research and Innovation in Building and Construction (W110 CIB), and Nusantara Urban Research Institute (NURI). The theme “Enhancing the Locality in Architecture, Housing, and Urban Environment” provides papers and presentations on a wide range of topics indicating the breath and scope for both research and teaching within the area of architecture and the built environment.

Actually this Conference would be held on November 26-27, 2010. Due to the eruption of Merapi Volcano since October 26, 2010; especially the most dangerous eruption on November 05, 2010; the Conference has been rescheduled to January 21-22, 2011. We thank you for your kind commitment to this Conference.

These proceedings have been prepared from the papers provided by more than 60 presenters accepted from approximate 135 abstracts from about 10 countries. Finally, on behalf of the Department of Architecture, Faculty of Architecture and Design (formerly Department of Architecture, Faculty of Engineering) we thank you to all contributors to the Conference: CIB, ITS, NURI, the members of Steering Committee and Organizing Committee as well, International Reviewers, all presenters and participants, and last but not least to all members of Duta Wacana Christian University for their generous supports. Without them, this Conference would not be possible.

Prof. Ir. Titien Saraswati, M.Arch., Ph.D.
Dr.-Ing. Wiyatiningsih, S.T., M.T.

Editor
INTRODUCTION

The incongruous impact of globalization towards the existence of indigenous and national resource has gained international interest. Efforts to restore the quality of the threatened environment for the living have raised concerns on finding local strategies to understand and manage the impact world widely. Unfortunately, the most common answer to this situation cannot be done only by a single discipline. In term of design, it is not enough to give solution to the problems unless we deal with the uniqueness of the social, economic, and cultural context of the local community in each country.

One of spatial characteristics of urban areas in developing countries is the emergence of slum areas and squatter settlements which are only seen partly in the urban development. These settlements are occupied by the poor working in informal sectors around the city centre. These people demonstrate great ingenuity in developing their residential neighbourhoods, organizing open spaces and constructing their houses, even though the government views them as illegal. To view the poor not as a problem requires honest and good motivation. This International Conference explores new paradigms which focuses on enhancing and fostering local knowledge and wisdom for sustainable developments in Architecture, Housing, Urban Design as well as Urban and Regional Planning.

AIM AND SCOPE

The Conference discusses and critically examines the phenomena occurred in Architecture, Housing, and Urban Developments within developing countries. Sub-themes might be related, but not limited, to the following topics:

A. Indigenous Architecture as a Basic Architectural Design
   - The use of Local and Recycled Materials
   - Innovative Building Construction
   - Traditions and Vernacular Architecture
   - Sustainable Design and Construction
   - Indigenous Strategy for Disaster Preparedness

B. Informal Settlements as a Basic Development for Housing Improvement
   - Self-sufficient Built Environment
   - Pro-poor Housing Policy, Planning and Efficiency
   - Parametric Computational Tools for Sustainability
   - Total Participatory and Advocacy Development Planning

C. Harmony with Nature for Sustainable Urban Development
   - Assessment for Sustainable Urban Planning and Design
   - Man-made and Natural Environment in Harmony
   - Sustainable Urban Greenery
   - Appropriate Technology for Sustainable Built Environment
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A. Indigenous Architecture as Basic Architectural Design

3.1.27

"ONE KAMPUNG ONE PUBLIC FACILITY" AS AN INITIAL PHASE OF KAMPUNG ORIENTED DEVELOPMENT: STUDIO'S CONSIDERATIONS

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ABSTRACT

Kampung is an integral part of urban structure in developing world, especially in Indonesia. Undoubtedly, kampungs and its entities that embrace social, economic, culture, as well as physical dimensions showed an important role to represent urban settlement model in Indonesian cities that dealing with many related problems. Kampung should consequently be believed as entry point and has direct role to spread both idea and concept of sustainability in Indonesian cities. Kampung Oriented Development (KOD) will be a strategic approach through a comprehensive policy using kampung as focus area of development. It ideally encompasses several intensive developments based on characteristics of kampung. Consequently, it is important to carry out One Kampung One Public Facility (OKOP) as an initial strategy to examine on how kampung might be changed as KOD objectives. The aims of the paper were to discuss consequences of OKOP implementation theoretically and to assess performances and effects of OKOP through some models, which were developed in the urbanism studio at the Department of Architecture and Planning, Universitas Gadjah Mada. Place making framework was used intensively to undertake high-density kampungs at Malioboro surrounding districts in Yogyakarta City as cases of study. The results showed significantly that OKOP in term of bringing back urban activities inside kampungs and collating kampungs as cores of urban activity system should be considered as an effective infill process of sustainable urban development in Kampung Oriented Development’s context.

Keywords: Kampung oriented development, one kampung one public facility, sustainability model

I. INTRODUCTION

Inevitably, kampungs are an integral part of both urban spatial structure and urban life in Indonesia. They are body as well as soul, where the cities in Indonesia is growing and facing at the same time many development problems. Almost all aspects of urban life, whether social, cultural, political, and of course physical environment can be traced using kampung as a basis unit of analysis. However, up to now urban kampungs are still seen as less strategic to deal with recent urban development. Many people assume that by looking at a macro strategy in advance, all urban problems can be overcome. In fact, this assumption is not easy to do and often the outcomes are difficult to be traced through the most representative unit in the city, the urban kampungs.

![Diagram of Kampung Oriented Development](image)

Figure 1. Kampungs that represent compactness condition as an integrative urban unit

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Similarly, kampungs should have a crucial role as a backbone of implementation issues for urban sustainability. Because of its role, undoubtedly any initiation of sustainable urban development in Indonesia should need to think about kampung as an entry point for the implementation. This fact really showed the importance of Kampung Oriented Development (KOD). Of course, traditionally there has been plenty of local knowledge that has been running well in the urban kampung. For example, how harmoniously living in dense residential or mixed-used of space that is lately suggested by the west, has always been present and growing in kampungs for a long time. Thus, our task now is to try to formulate how actually universal values of sustainable urban development such as high population density, high activity concentration, optimal urban size than can easily control the environment, supported system for a good mobility, and achievement of good welfare, can be integrated in the developments inside kampungs, as illustrated in Figure 1.

This paper becomes one of scientific media of school activities to observe the important role of kampungs in facing current demands of finding sustainable development model. One Village One Public Facilities (OKOP) is consequently taken as a representative theme of the kampung oriented development’s strategy. The purpose of this paper is two folds. The first is to observe theoretical viewpoint of OKOP application, associated with actual condition of kampungs as well as some ideas of sustainable development strategy. The second is to look at application and transformation of OKOP based on the actual condition of densely urban kampungs in the center part of Yogyakarta City. This application is carried out through a thematic studio at the Department of Architecture and Planning, Universitas Gadjah Mada, Yogyakarta. In the future, the results of the developed works in the studio may be used as important references to further application of OKOP’s concept.

II. ONE KAMPUNG ONE PUBLIC FACILITY (OKOP)

Why must we start to think and act urban development from the urban kampungs? As previously mentioned, kampungs have a direct connection with the urban systems. Discussing about urban and its entities in Indonesia, it will not be possible without put kampungs in core position of the discussion, direct or indirect. Therefore, preposition of this paper is that kampungs can be seen as "entry point" to solve the problems of the city, despite all of these attempts seem to be ignored recently. "Kampung Oriented Development" should be a jargon of urban development in Indonesia today. It should be believed that kampungs that grows (or developed) sustainably, then the city also would be sustainably developed respectively.

Figure 2. Scope and access of services for each environmental facilities (Urban Task Force, 2002)
In Roychanyah (2008), kampungs have a good tendency for both high population and built environment density, as well as good performance for delivering mixed-use in various urban functions. However, this positive diversity is still presumed as either individual creativity or forced strategies incidentally. Another visible phenomenon is inequality in provision of public facilities required by kampung's residents. Spatial standard in environmental service for public facilities as confirmed by the Urban Task Force (2002) and shown in Figure 2 has not been taken into account proportionally, so the result of its services are not so optimal. As a result, in some kampungs the residents are often seen out of the kampungs to access public facilities they need. Therefore, the idea of public facilities provision could be a vital alternative for structuring concept of more intensified kampung.

As identified by Wachter (1996), Long and Hutchins (2003), indeed there are two main factors how the neighborhoods could create and sustain the existing communities. They are social environment and physical and services environment. The neighborhood as a social context could be viewed as any particular local communities consists of a variety of social networks such as social support and community engagement activities. Whilst, the neighborhood as a physical and services environment could be seen as public facilities and infrastructures that are essential services such as shopping centre, parks and leisure centers, transportation hub, provision of sidewalks, and other facilities may promote or discourage the physical activity and social interaction of the local communities. As pointed by Poplin (1979), the neighborhoods that provide good social networks and physical facilities, mainly in public facilities, have a direct influence on the better performance of community.

Neighborhoods decline when the people who live there lose their connection and no longer feel part of their community. Recapturing that sense of belonging and pride of place can be as simple as planting a civic garden or placing some benches in a park (Walljasper and Project for Public Spaces, 2007). They explained how most struggling communities can be revived, not by vast infusions of cash, not by government, but by the people who live there, community based development as kampung in Indonesia also already have “gotong royong”. One of the methods is “place making” that elaborates process of transforming public facilities or public space within small steps and contains motivations to others to make change should be as main choice.

One kampung one public facility (OKOP) should be one way on how kampung should be placed back as the smallest unit of a community center in the city. In this case, kampung can be equivalent to the neighborhood in other parts of the world. There, similarly, attention to public facilities is also included as important strategy in neighborhood planning towards a centered place of sustainability implementation. Chira and Wann (2003) or other practical transformation by towns and cities in the US and England put the provision of public facilities among other keys of place making such as human scale, size of access, resource management, open space, streetscape, variations, multi-function, coordination, and maintenance. In Japan, concretely, planning a "public realm" will be started by focusing on the provision of public facilities (Koizumi, 2009).

Together with some concepts or findings that are running recently, such as a high-density condition of urban kampung and an abundance of urban functions inside kampung, elaborating all these attributes as a maximizing model would be interesting. In addition, by combining several constraints, such as limited access, weak transport mobility network in the city, and socio-economic gap among residents (Roychansyah, 2008), also becomes a strong challenge in elaborating kampung complexities into planning and design output. This OKOP is expected to generate the ability of kampung and its community towards better growth. Indeed it may be impossible for a public facility in a kampung to answer and tackle problems of urban sustainability more broadly by its single entity. But if the model is distributed into more widespread and systematic urban policy, for instance they are built in every kampung, then the result would be extraordinary.

III. PLACE MAKING OF “OKOP” THROUGH STUDIO MODEL

Here, the concept of OKOP was tried to introduce to students of Thematic Studio 1 (semester 6). The theme of studio in 2010 was "Jogja Sustainable Future". In this studio, students choose and rely on supervisor interest (the author) in which should be associated with the major theme. By studying
A. Indigenous Architecture as Basic Architectural Design

kampung, practically students will better understand problems that exist in their surroundings. They are expected to put kampung at the core context consciously for working. Learning the urban problems through kampungs, they basically will be able to portrait the existence dichotomy inside kampungs, such as formal-informal, modern-traditional, legal-illegal, as well as urban and rural life (especially kampungs that receive many villagers that migrate to urban areas). Spatially, students are expected to understand and should be challenged to propose a spatial strategy in solving urban kampungs: dynamic mixed-function, flexibility in spatial separation, uniqueness of social spaces, and others. As a final target, they should be able to produce the problem solving through planning concept and design.

Table 1. Basic working reference by “place making” (Project for Public Space, 2010b)

<table>
<thead>
<tr>
<th>Place Making Is</th>
<th>Place Making Isn’t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community-driven</td>
<td>Imposed from above</td>
</tr>
<tr>
<td>Visionary</td>
<td>Reactive</td>
</tr>
<tr>
<td>Function before form</td>
<td>Design-driven</td>
</tr>
<tr>
<td>Adaptable</td>
<td>A blanket solution</td>
</tr>
<tr>
<td>Inclusive</td>
<td>Exclusionary</td>
</tr>
<tr>
<td>Focused on creating destinations</td>
<td>Monolithic development</td>
</tr>
<tr>
<td>Flexible</td>
<td>Overly accommodating of the car</td>
</tr>
<tr>
<td>Culturally aware</td>
<td>One-size-fits-all</td>
</tr>
<tr>
<td>Ever changing</td>
<td>Static</td>
</tr>
<tr>
<td>Multi-disciplinary</td>
<td>Discipline-driven</td>
</tr>
<tr>
<td>Transformative</td>
<td>Privatized</td>
</tr>
<tr>
<td>Context-sensitive</td>
<td>One-dimensional</td>
</tr>
<tr>
<td>Inspiring</td>
<td>Dependent on regulatory controls</td>
</tr>
<tr>
<td>Collaborative</td>
<td>A cost/benefit analysis</td>
</tr>
<tr>
<td>Sociable</td>
<td>Project-focused</td>
</tr>
<tr>
<td></td>
<td>A quick fix</td>
</tr>
</tbody>
</table>

In particular, framework used in this studio is a bit different. Besides conservative method of finding problems, doing surveys, collecting data, making analysis, developing alternative solutions, and issuing a proposal, there is an emphasis on a framework of place making. Place making itself as expressed by Bohl (2002) is a way to optimize the potential, problems, and identity in a place so that all the elements that had to be engaged to work well. So in addition to the design at the end, place-making also requires a strategy to bring the uniqueness as well as the need for local communities. Thus required an intensive exploration of the object of study. Whyte (1981) wrote that the social life in public spaces contributes fundamentally to the quality of life of individuals and society. He suggested that we have a moral responsibility to create physical places that facilitate civic engagement and community interaction. Jacob (1961) for example has always stressed an importance of seeing the phenomenon based on the place. She highlighted the importance and led the way in advocating for a place-based, community-centered approach to urban planning, decades before considered sensible such approaches were the resource persons.

Project for Public Space (2010a) wrote that there are 11 key elements in place making. They are respectively community as the expert; creating a place, not a design; looking for partners; see a lot just by observing; having a vision; starting with the petunias: experiment is vital action; triangulation; all should be done; from supports function; money is not the issue; and the place is never finish. In addition, PPS (2010b) wrote that place making is not just the act of building or fixing up a space, but a whole process that fosters the creation of vital public destinations: the kind of places where people feel a strong stake in their communities and a commitment to making things better. Place making capitalizes on a local community’s assets, inspiration, and potential, ultimately creating good public spaces that promote people’s health, happiness, and well being. Completely in Table 1 is shown a basic reference that should be used when people works in place making’s framework. Besides working with the basic reference, students are also asked to be able to synchronize data-quality-attribute of place in the case studies as depicted in Figure 3.
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Figure 3. The place diagram is a tool to help communities evaluate places. The inner ring represents key attributes, the middle ring intangible qualities, and the outer ring measurable data.

(Project for Public Space, 2010b)

In the studio process, a semester was divided into 3 phases. First, completely the student understood the big themes of "Jogia Sustainable Future" itself. Here there were 2 key words that need to be mastered: Jogjakarta City and its characteristics, and the concept of sustainability. The second phase was decision in undertaking appropriate case studies, begun with an activity of kampung exploration ("jelajah kampung") as well as organizing related activities such as expert lectures and intensive discussion about kampungs. From this phase students were expected to be able to select a potential kampung as their "pilot projects" in the studio. Final phase was the most crucial sequence in which they should answer the needs of the kampung public facilities. Inevitably, because it emphasized process of the studio within place-making framework, some activities like discussion and collaboration with the kampung communities to catch their participations is a must. The outcome was a provision of public facilities that should merge various functions, such as public libraries, media center, cultural center, community center, transit house, social house, rental house, museum in kampung, even mass public toilet or MCK (bath-wash-toilet). Essentially, the target of the studio is how to create kampungs to become center of urban activities. This public facility should be able to be used optimally by the kampung communities themselves, as well as used by urban communities at large as shown in Figure 4.

Figure 4. Graz Cultural Center (kunsthaus) in Graz, Austria by Peter Cook and Colin Fournier (left, courtesy of www.avoe.org) A simulation of Kampung Ratmakan, Yogyakarta and some scenarios of its "infill mixed-use facilities" (right, private collection)

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IV. RESULT AND DISCUSSION

Using developed framework, participants of the studio (total of 6 students) were asked to perform and complete all the steps above. Kampungs in the city center of Yogyakarta was used as the case studies. One person arranged a different kampung that located and has direct access to Malioboro Street. The kampungs are administratively included in 4 different districts/wards in Malioboro Street (Danurejan, Gondomanan, Ngampilan, and Gedongtengen, see Figure 5). These districts have also been recorded as districts with the highest density in the city of Yogyakarta, more than 20,000 person/km² (Yogyakarta Statistics Bureau, 2007). However, the distribution of each participant with the case study is 1. Kampung Ratmakan (Gondomanan District), 2. Kampung Suryatmajan (Danurejan District), 3. Kampung Pathuk (Gedongtengen District), 4. Kampung Sosrowijayan (Ngampilan District), 5. Kampung Notoyudan (Ngampilan District), and 6. Kampung Tegal Lempuyangan (Danurejan District).

In doing process of the studio, all participants were consistently implementing a simple framework in "place making". In this case, they mainly observed the kampungs precisely and advocating community's opinions for multi-purposed public facilities they want. As shown in Figure 6, in the case 1, an optimal result that could be issued was a multi-purposed community center for meetings, libraries, and sports. In the case 2, it was appeared a model of social housing that can accommodate other activities in linear space, such as traditional linear markets, children's playground, and open spaces. The case 3 was unique because the location of the existing work was on a linear market inside the kampung. Here, the case only added a shared public-facility such as office space for the market traders association, multi storage, and sport gym. Meanwhile, for the case 4, several parcels were created simultaneously that each should be able to serve and accommodate kampung communal activities, such as art workshop, community center, shops, and so forth. The case 5 has not only produced a multi-purposed room for the public, in addition it also resulted an ideas of rearrangement of building density. For the case 6, it was a scenario to facilitate integration between transit and stay in the kampung where it was directly adjacent to a vital railway station in the city. All cases identified that infill process in adjusting public facilities will be effective strategy to deal with existing context of kampungs.

Figure 5. Distribution of kampungs that were taken as case study of OKOP Studio
From overall process, it seems that in a concrete substance, kampung residents can accept the idea of development based on urban kampung (KOD). This finding is coincided with previous finding that kampungs traditionally have awareness and wisdom to carry out activities inside kampungs (Roychansyah and Diwangkari, 2009). Both discussions through rapid assessment with limited key persons or group forum group discussion with many participants of kampung residents always get the same picture of optimism for future implementation of sustainability in the kampung daily life. They recognize that kampung problems in various dimensions always appear. Nevertheless, they are explicitly always optimistic to state that the problems could be resolved if all kampung residents have a similar vision. From what the studio participants have seen and explored to the kampungs community, actually they are enthusiastic about the idea of inserting a multi-purposed public facility that is able to strengthen their presence in the kampung daily life. Even so, these residents are also not sure how it could be realized to their real life. In addition, land issues related to ideal location for its public facility must be placed proportionally since it still becomes subject of lengthy discussion among residents. Advocacy for the residents on how the role of optimized public facilities would be essential. Technically, at the beginning of the studio, the kampung communities have a reluctance to discuss about the conditions of their kampungs and public facilities that will be applicable for their kampungs. For the time being and through some further intensive discussions, they could openly express their opinions. In this case, it is recognized that the place-making framework requires a very high level of communication and it is very decisive.

![Figure 6. One kampung one public facility (OKOP) scenario for 6 different kampungs as case studies.](image)

V. CONCLUSION

This paper is part of a sequence of research in kampung oriented development (KOD), particularly to observe appropriateness of sustainable development’s implementation in Indonesian cities. KOD has been chosen with strong background that however, urban kampungs should be an entry point of sustainable development initiation in urban spatial level. Focusing urban activities in each respective kampung could be one of important ideas to strengthen the kampung existence that has already a high density performance and mixed-function of activities on it. Development of multi-purposed public facilities in each kampung could be a strategic agenda to achieve a successful implementation of the KOD.

One Village One Public Facility (OKOP) was attempted to observe its possibilities through an urbanism studio (thematic studio) at the Department of Architecture and Planning, Universitas Gadjah Mada, Yogyakarta. During one semester, 6 student participants conducted an intensive studio with 6 densely kampungs in the center of Yogyakarta City. In the studio process, a simple framework of place making was applied, especially to find a “place” that suitable to the local preferences. The end result was a public facility in the kampung that has various functions (multi-purposed) and possibly its scope of activities extends to accommodate wider urban residents. Despite it is still far from an ideal process, especially in relation to the research method that should be carried out coherently and tight, but in general the results showed the enthusiasm of kampungs and their residents for the idea of...
OKOP and KOD. At the very least, the public appreciation to this idea seems positive. It might promisingly be followed up in further level through more proportioned researches and related campaigns.

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