waterfront development

international seminar, exhibition,
excursion, networking development
2nd-3rd August 2003 in Jakarta Indonesia

WATERFRONT
DEVELOPMENT

DEPARTMENT OF ARCHITECTURE
FACULTY OF CIVIL ENGINEERING AND PLANNING

TRISAKTI UNIVERSITY
Campus A, Jl. Kral Taya No.1, Jakarta 11440, Indonesia
International Seminar, Exhibition, Networking Development, Excursion
"Waterfront Development"
2–3 August 2006

Proceedings

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Phone (62)(21) 5663232 ext. 215-216
Fax (62)(21) 5684643
E-mail: Dayung332@yahoo.com
http://www.trisakti.ac.id

Edited by
Tulus Widiarso

Cover designed by
Dani Dwiyandana
Tulus Widiarso
Preface

As a vital resource, water can shape cultural characteristic of community. Waterfront area, where land and water meet, constitute the unique place and important in the forming of many cities in the world. The significant role of water in the culture life of society should convey the local spirit in preserving the water resources and reflect the local identity. However, the problem solving related to the suitable waterfront development and the local condition may still need inputs from outsider.

This book is a proceeding of the International Scientific Event (Seminar, Exhibition, Networking Development, Excursion) on Waterfront Development, which was held in 2-3 of August 2006 in Jakarta by The Urban Design and Planning Studio of Department of Architecture, Trisakti University. The main purpose of the event is to assess various factors of waterfront development, as well as to identify the indigenous aspect and external influences for sustainable waterfront development.

This proceeding contains scientific papers, hand-outs and posters, presented in categories:

A. Invited works, consist of 3 papers and 8 hand-outs.
B. Presented works, consist of 15 papers and 3 hand-outs.
C. Supplement works, consist of 14 papers.
D. Network development ideas, consists of 1 hand-out.
E. Presented posters, consist of 4 posters.

Finally, appreciation is extended to all contributors for providing the subject matter of this proceeding.

Jakarta, August 2006
Editor
The First International Seminar on Waterfront Development

Committee Report

The First International Seminar on Waterfront Development was held in 2-3 of August 2006 in Jakarta. The Seminar was organized by The Urban Design and Planning Studio of Department of Architecture, Trisakti University at Jakarta.

The main purpose of the Seminar is to assess various factors of waterfront development, as well as to identify the indigenous aspect and external influences for sustainable waterfront development.

As a result, 235 participants from 3 countries attended the Seminar and 27 scientific papers on waterfront development were presented in the seminar. Four (4) Posters were exhibited on the Seminar. Along with all the papers being presented on the seminar the posters are also included as the integral part of this proceeding.

From the various papers it the following conclusion can be mentioned:

1. As an island country, waterfront development will become the future of Indonesia.
2. As part of human settlement, the development of waterfront should be considered as a multi-stakeholder venture.
3. Environmental issues such as global warming and environmental sustainability should be considered as one of the key considerations in waterfront development.
4. Indigenous knowledge on waterfront should be considered as a source for future development.

The Seminar participants also agree that Waterfront Development should be approached holistically by the participation of all stakeholders, legally, economically, environmentally and last but not least indigenously.

The participants also agree to make The International Seminar on waterfront Development a periodic Seminar. It is agreed that the same seminar should be held every two years. For 2008 it is agreed that the International Seminar on Waterfront Development will be held again in Jakarta and will be organized by The Department of Architecture, Tarumanegara University.

Finally, as the organizer of the seminar we would like to thank the entire participant. See you all again in Tarumanegara University in 2008.

Jakarta, August, 2006
Committee
# List of Contents

<table>
<thead>
<tr>
<th>Preface</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committee Report</td>
<td>ii</td>
</tr>
<tr>
<td>List of Contents</td>
<td>iii</td>
</tr>
<tr>
<td>Opening Remarks by Head of Organizing Committee</td>
<td>vi</td>
</tr>
<tr>
<td>Welcome Speech by Head of Department of Architecture</td>
<td>viii</td>
</tr>
<tr>
<td>Welcome Speech by Dean of Faculty of Civil Engineering and Planning</td>
<td>ix</td>
</tr>
</tbody>
</table>

## A. Keynote Address

**Djoko Kirmanto**
Minister of Public Works

(A.1 - A.6)

## B. Invited Works: Papers

1. **Achmad Harjadi**
   Jakarta Waterfront Development Policies
   (B.1 - B.7)

2. **Johannes Tulung**
   Peran Pengembang dalam Pembangunan Tepi Air
   (B.8 - B.10)

## C. Invited Works: Hand-Outs

1. **Achmad Harjadi**
   Jakarta Waterfront Development Policies
   (C.1 - C.15)

2. **Budhiy Tjahjani**
   Special Planning for Waterfront Development
   (C.16 - C.25)

3. **Budi Karya Sumadi**
   Revitalisasi Pantai Ancol Sebuah Pengalaman Pengembangan Kawasan Tepi Air
   (C.26 - C.31)

4. **Djoko Kirmanto**
   Waterfront Development in Jakarta
   (C.32 - C.38)

5. **Djoko Ramadhan**
   Kebijakan Pembangunan Pemerintah Kabupaten Administrasi Kepulauan Seribu
   (C.39 - C.54)

6. **Erna Witoelar**
   Sustainable Development and Good Governance in Waterfront Development
   (C.55 - C.61)

7. **Johannes Tulung**
   Peran Pengembang dalam Pembangunan Kawasan Tepi Air
   (C.62 - C.79)

8. **SL. Lee & AR. Soehoed**
   Coastal and Waterfront Development
   (C.80 - C.91)

## D. Presented Paper

- **Waterfront: Theory and Reality**
  1. **G. Uhlig & Lars Herkel**
     Discursive Townplanning at Waterfront
     (D.1 - D.5)
  2. **Hendra Prabowo & Heri Suprapto**
     Cultural and Environmental Consideration of The Jakarta Bay Development
     (D.6 - D.13)
  3. **Rotno Susanti**
     Northern Coastal Cities Waterfront
     (D.14 - D.20)

## Types of Indigenous Waterfront

4. **Agus Budi Purnomo**
   Waterfront Development Concepts According to Namb usual Agura’s Bautanasmalin
   (D.21 - D.25)

5. **Wukhidah Kurniawati**
   The Old Multiethnic Kampong Along Semarang River
   (D.26 - D.30)

6. **Widya Fransiska FA**
   The Spatial Potency of Under Ampara Bridge
   (D.37 - D.42)

7. **Amanda Pengkuan Wulandari**
   Integrated Approach to Enhance Riverfront Development Performance
   (D.43 - D.55)

8. **AR. Soehoed**
   Waterfront Development
   (D.56 - D.64)
<table>
<thead>
<tr>
<th>Title</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wijaya Martokusumo: The Old Town Jakarta, The Renaissance of Urban Heritage Development</td>
<td>(D.70 - D.82)</td>
</tr>
<tr>
<td>Ery R. Kridiani &amp; Bayih Budiarti: Experience, Planning and Design of Waterfronts</td>
<td>(D.83 - D.84)</td>
</tr>
<tr>
<td>Indigenous Philosophy of Waterfront Development</td>
<td></td>
</tr>
<tr>
<td>Amanda Pingkan Wulandari: Local Perceptions and Preferences: Preserving Riverfront as Cultural Landscape</td>
<td>(D.89 - D.95)</td>
</tr>
<tr>
<td>Budi Prayitno: Borneo Riverine Ecopolitan: Symbiotic Amphibious Urban Frontier</td>
<td>(D.96 - D.100)</td>
</tr>
<tr>
<td>Sustainable Development &amp; Good Governance</td>
<td></td>
</tr>
<tr>
<td>Mohammad J examining Siregar: Networks Relations in Governing Urban Waterfront Development</td>
<td>(D.100 - D.109)</td>
</tr>
<tr>
<td>Sigit Wijaksono: Do Animals and Plants Have Right in Waterfront Areas?</td>
<td>(D.110 - D.118)</td>
</tr>
<tr>
<td>Presented Hand Out</td>
<td></td>
</tr>
<tr>
<td>Sri Astuti: Effort of Water Back Transformation into Waterfront as an Ecological Balance in Settlement Program</td>
<td>(D.119 - D.124)</td>
</tr>
<tr>
<td>Basuki Umarr Lubis: Agains: The Waterfront City of Asmat</td>
<td>(D.125 - D.134)</td>
</tr>
<tr>
<td>Andon Setyo Wibowo &amp; Johan Silas: Surabaya Waterfront City</td>
<td>(D.137 - D.144)</td>
</tr>
<tr>
<td>Supplement Paper</td>
<td></td>
</tr>
<tr>
<td>Adhy R. Thalir: Sustainable Spatial Development Plan of River Basins in Urban Area</td>
<td>(E.1 - E.12)</td>
</tr>
<tr>
<td>M. Ali Topan &amp; Nima Nurdiyani: The Physical Character and Determinant Factors of The Waterfront City</td>
<td>(E.13 - E.22)</td>
</tr>
<tr>
<td>Dedi Nur Gandurum: Environmental Governance for Sustainable Urban Waterfront Development</td>
<td>(E.31 - E.36)</td>
</tr>
<tr>
<td>A. Hadi Prabowo: Factors of Urban Vitality in Muara Angke Jakarta</td>
<td>(E.43 - E.46)</td>
</tr>
<tr>
<td>Hary Wahjono: The Challenge to The Historical Waterfront Development</td>
<td>(E.47 - E.56)</td>
</tr>
<tr>
<td>Ivanovna: Thermal Comfort in Urban Waterfront Area within Hot-Humid Climate</td>
<td>(E.57 - E.63)</td>
</tr>
<tr>
<td>Khatijah Lohi &amp; Yulindani Iskandar: Local Understanding in Overcoming the Structure and Construction of Houses in Musi River-shore Palembang</td>
<td>(E.64 - E.80)</td>
</tr>
<tr>
<td>Lukasmi Utami: The Meaning of Water for The Island Societies and Coastal Societies in West Java</td>
<td>(E.81 - E.87)</td>
</tr>
<tr>
<td>Lucyas Helly P &amp; Ashar Ariyanto: Community Based Development Riverfront Urban Renewal</td>
<td>(E.88 - E.94)</td>
</tr>
<tr>
<td>Masanko OKADA: Landscape of Industrial Waterfront</td>
<td>(E.95 - E.100)</td>
</tr>
<tr>
<td>Popi Puspitasari: Density and Territory</td>
<td>(E.101 - E.112)</td>
</tr>
<tr>
<td>Sri Handjajanti: The Meaning of River for Traditional Life in Indonesia</td>
<td>(E.113 - E.120)</td>
</tr>
<tr>
<td>Networking Development Hand-Out</td>
<td>(E.1 - F.9)</td>
</tr>
</tbody>
</table>

Preface & Committee Report
Borneo Riverine Ecopolitan:
Symbiotic Amphibious Urban Frontier

Budi Prayitno
Center for Oceanic Architecture and Urban Design
Gadjah Mada University
Email: budi_prayitno@atmospheremagz.com

Abstract

The rapid land-based cities development in 'Borneo' Kalimantan have caused the disappearance of riverside cities images and characteristics. The natural environment is suffering extensive deterioration and much of aquatic riversine living culture is disappearing.

The Borneo amphibious settlement was original form for aquatic habitation in the wetlands area. Concerning the morphological city in the earliest period which was located on the aquatic frontier area, the most distinctive features are the low-lying land and networks of rivers and canals. The settlements prototypes were structural floating on the water and on stilts situated along the periphery of the aquatic or land area.

This aquatic living behavior seems to have been suppressed with the land-based urban living culture. However, the aquatic instincts of the people and the 'ocean-mountain' interrelationship concept of the Indonesian archipelagic context in the past still exists.

Thus, the idea to develop the amphibious urban future concepts may generate the more hybrid and more sustainable riverfront city model. This paper proposes some new model of Borneo riverine ecopolitan based on the environmental, cultural and architectural values.

Keywords: aquatic, frontier, riverine, amphibious, ecopolitan

A. Introduction

The origin of Borneo riverfront cities were growth and developed by the harmoniously symbiotic interrelationship with the aquatic natural resources and strongly attachment to the aquatic living culture. However, the rapidly land-based metropolis growth which followed by small cities have caused the disappearance of riverfront city characters. The impacts of this phenomena, both the aquatic natural environment of many Borneo riverfront cities is suffering extensive deterioration and their riverine living culture is disappearing.

The planning policy is still focused and interested in such new urban land-based development with short-term planning vision in order to fulfill the spontaneous needs and short-term objectives of raising the standard of consumerism living style.

B. Concept of Amphibious City: Cultural Sustainability

Borneo's people living in harmony with the riverine environment which showed by their settlements, towns and cities sprung up along the rivers and canals. Banjarmasin, for instance, was a rivertown criss-crossed by canals and referred to European chroniclers as Venice of the East.
The people lived in amphibious houses on stilts or in floating houses. There living style thus water-based or aquatic oriented culture which gave rise to a unique culture that can stand equally well in water as on land. Their rivers perform several functions for riverfront city including being a water supply and daily consumption, a water sources for agricultural and industry activities, a city’s waste recipient, a gateway and waterfront, an open space and pleasure activities area and being a food source for ecological balance.

However, this urban riverfront cultural system has changed and the aquatic riverine system was used as means to 'colonize' to original land through hierarchical system of water corridor and finer distributing aquatic urban form in the past. The land-based technology used to replicate the riverfront city system through a network of roads and opening agriculture lands for real estate and industrial developments.

Thus, it is needed to formulate the question of relationship between city and water as the mainline for creating the appropriate city model which based on their original living style and set up a hypothesis for recognizing the river as a major environmental features in the urban modern living style as far as management of land use, infrastructure and flood risk and prevention system.

C. Riverine Zone Management: Natural Sustainability

In the archipelagic context, water gets recognized as a main environmental features as far as management of water resources potency and water disaster system. In cosmological model the water symbolism was a total experience of oceans and mountains and a total of environment on macrocosmic scale. Most of Javanese, Madura, Bali and Lombok royal city has an 'upper stream and down stream' characters for symbolizing the total living world. The Indonesian archipelagic country constitutes mountain and oceans in the making.
Thus, the ‘land-based and water-based linkage’ civilization plays a main role in search for symbiosis within the archipelagic fabrics system.

A. Riverine Interaction Areas (Economies), riverine zone is an unique area based on its eco-sociosystem such as: a multiple use zone which has a highly biodiversity and common property resources and open access areas, habitats for endemic and endangered species, and spawning, nursery and feeding areas for riverine organism and accumulated land-based waste area. There are also some functions of riverine zone for urban living culture such as: environmental services for urban living support, amenity services, natural resources and wastes reservoir and absorber.

In the context of riverine zone management, the fact that the problems appeared in the riverine zone are mainly caused by the external factors such as come from land-based urban living activities which are through watershed directly or indirectly impacted riverine zone. To solve or at least to minimize these problems, a watershed-based integrated riverine zone management is importantly needed for achieving sustainable riverine zone management.

D. Riverine Ecopolitan

The preliminary proposed model of Borneo riverine ecopolitan presented here is not about imposing aquatic environmental and cultural living zone blindly as conservation reserves has been on the formal national program which always leads to conflict on land-based priority development agendas. Nor is it about fulfilling nostalgic yearnings for past aquatic living style and forms as tourism assets as sustainability here will most probably entail looking to foreign precedence/practices in revitalizing deteriorated waterway to adapt and assimilate-in line with age-old cultural practices as well as modern urban living style. Thus, rather, it is possibly about efficiently defining and organizing various kinds of interrelationship between land-based and water-based activities and reintroducing ecological system and flows to orchestrate into harmoniously symbiotic urban living culture and form.

The concept of ecopolitan is built out of two etymological roots, corresponding to different patterns that cannot be separated within the common imaginary: “eco” and “polis”. The meaning the word “eco” is interrelationship between human and nature. The word “polis” is built out of another word of city. It signifies the “harmonious interrelationship between human and nature” – based city model. This can be initiated through macro and micro strategies to redress both wider level formal planning practices and local level informal practices working with the key ingredient of concept of river, city and community. On the macro level, at least equal planning and implementing effort could be directed toward the riverfront zone and riverine living culture regeneration. The revitalized river and canal system has potential to be the linkage that ties together the urban artificial and natural network system, through for instance, introducing linier greenways (vegetation) and blueways (river and canal) with integrated parklands, water catchments for local run-off, water-cleansing areas for local sewerage, appropriate riverine settlement in the modern urban life style context, etc.

Designing and implementing strategies for riverfront zone and riverine culture
regeneration, tailoring to the specific context of each urban element and form, can be seen as another inappropriate formal approach that often adjust current land-based practices. Inevitably, even this formal planning implementation will accumulate many problems of the informal approaches for maintaining the original characteristics of Borneo riverfront settlements, but sustaining it symbiotic linkage with natural and cultural dimension.

In fact, the implementation process is less about huge investments in infrastructures, but rather drawing up planning and design strategies towards Borneo riverine ecopolitan, which clearly sets out the stages of incremental development and implementation. The strategy must provide clearly defined goals with the spatial strategies and practices that will lead towards it which most practically starting with where to and where not to build. How Borneo riverine ecopolitan imagination to be realized or materialized in the future ultimately depends on the will and desires of community and urban politicians. Borneo riverine ecopolitan has the making of beautiful city, and the rivers and canals could become the focal points of a movement aimed at rejuvenating city. Waterway embankments and strategically placed pleasure pocket parks could provide peaceful environments and protective shade from the hot tropical sun. Then maybe one day, Borneo riverine cities to become a future peaceful place of sustainable cities. So, to end with, we shall formulate the wish that waterways matter played a main role in the search for linkage within urban fabric.

E. Conclusion

As a conclusion, it could be noted here that ecological values for designing the riverine cities and settlements include those environmental values (the ability to live in peace and safety) and economic values (the opportunity for work and the ability to earn a living wage). Thus, community-based approach must assert the importance of public over the private values.
Based on this principles, the Borneo riverine ecopolitian model would take a symbiotic planning objectives and directions. One in which questions of environmental and cultural sustainability are addressed and where cities becomes a place where the public want to be.

References