

First International Conference organized within the framework of PolyUrbanWaters Research and Project Network (BMBF 2019-2025)

24-25<sup>TH</sup>  
MARCH 2021

ONLINE /  
BERLIN

# POLYURBAN WATERS

## Polycentric management of urban waters in fast-growing cities and peri-urban areas in Southeast Asia

The first international conference within the framework of the PolyUrbanWaters research and development project will explore the political, ecological and social relevance of integrated approaches in management of urban waters on a global scale. The conference brings together international researchers, practitioners, cities and regional representatives, policy makers, and global networks to discuss diverse cases from Southeast Asia and around the globe and sheds light on current development challenges, new experimental approaches towards integrated water-sensitive urban planning, and the possibility of knowledge transfer and transnational learning

PolyUrbanWaters is a research and project network funded by the German Federal Ministry of Education and Research (BMBF) that consists of academic institutions, municipalities, local and national government agencies, civil society and private-sector stakeholders from Indonesia, Cambodia, Laos, Thailand, Vietnam and Germany. Working through this network and on the ground in three pilot cities, the PolyUrbanWaters project aims to generate comprehensive scientific knowledge that helps develop practice-relevant strategic planning models for fast-growing cities and peri-urban areas in Southeast Asia, enabling them to implement polycentric approaches for water-sensitive urban development.



Code River in Yogyakarta, Indonesia

## Background

Since 2007, the majority of our global human population lives in urban environments and it is estimated that by 2050, two-thirds of all humans will live in cities. While cities are vibrant centers of growth and innovation, there are also many drawbacks associated with cities; they have an enormous resource consumption even though they only occupy two percent of the global land mass. Cities account for over 60% of global material consumption, more than two-thirds of the world's energy use and over 70% of the world's CO<sub>2</sub> emissions.

Growing cities heavily impact their surrounding environments with these increasing demands. An especially heavy pressure is placed on water resources within and in the proximity of cities. Intensified agriculture, domestic waste and industrial activities pollute water bodies. Increasing water demand typically leads to an unsustainable depletion of remaining unpolluted water sources. Additionally, in rapidly urbanizing areas, many cities struggle to provide service and infrastructure needs such as piped water and sanitation, thus adding pressure on publicly accessible water sources. To maintain the expected growth of cities while simultaneously increasing living standards, the question arises: how to prepare for a doubled urban population by 2050?

There exists an opportunity to rethink the current development approaches for fast-growing cities and peri-urban areas. Classical development approaches that suppose a constantly growing centralized infrastructure no longer reflect the realities, needs and capacities of modern cities. Infrastructure development in constantly transforming urban spaces requires more flexible, integrated modular approaches that can adapt to the development and needs of the cities over time.

The first international conference within the framework of the PolyUrbanWaters research and development project takes this as a starting point towards a global exploration of the political, ecological and social relevance of polycentric approaches to the management of urban waters. The conference will bring together international researchers, practitioners, cities and regional representatives, policy makers, and global networks to discuss the state of the art in this field and diverse case studies from Southeast Asia, Europe, North America and Latin America. This two-day conference will shed light on current development challenges, new experimental approaches towards polycentric water-sensitive urban planning, knowledge transfer and transnational learning.



Flooding in Kratie, Cambodia

# Conference Format

Due to current Covid-19 situation, the conference will be organised in hybrid format, accessible for external guests online via Zoom or a live stream on YouTube. Speakers and participants will join digitally from around the world.

For more information, please contact [j.westermann@tu-berlin.de](mailto:j.westermann@tu-berlin.de).

## Day 1: Project Workshops

The first day brings together the consortium partners of PolyUrbanWaters from around the globe with representatives from the partner cities in Southeast Asia, as well as invited experts.

**Participation by invitation only.**

## Day 2: Public Conference

The second day will be open to the public. In three sessions we will have a key note lecture and short presentations by invited experts as well as panel discussions with the speakers.

**Live stream via the YouTube channel "BORDA GLOBAL TV"**

[https://www.youtube.com/channel/UC6t\\_uU1\\_fxVQwC286b0DxA](https://www.youtube.com/channel/UC6t_uU1_fxVQwC286b0DxA)

SESSION 1

## Science-Policy Dialogue

**8.00 - 10.00 (CET) / 14.00 - 16.00 (ICT)**

Moderated by Jati Kusomowati and David Dietz, BORDA e.V.

Participants:

PolyUrbanWaters consortium partners and city representatives

This session creates a shared exchange platform between officials, scientists and other stakeholders from Southeast Asia and other international contexts to discuss current issues and approaches to polycentric management of urban water resources. The session will comprise a series of short presentations with a Q&A session and a panel discussion focusing on the PolyUrbanWaters project and water-sensitive polycentric urban development.

SESSION 2

## Preliminary Results

**10.15 - 12.15 (CET) / 16.15 - 18.15 (ICT)**

Moderated by Dr. Bernd Gutterer, BORDA e.V.

Participants:

German and Southeast Asian consortium partners

This session brings together the SEA and German PolyUrbanWaters consortium partners with invited experts. After short statements by all project partners, the aim of the session will be to discuss the upcoming R&D Phase of the project.



KEYNOTE SESSION

# Urban Water Resources in the World and in Southeast Asia

8.00 - 10.00 (CET) / 14.00 - 16.00 (ICT)

Moderated by David Dietz - BORDA e.V.



Welcome

**Dr. Bernd Gutterer**, BORDA e.V.;

**Prof. Dr. Philipp Misselwitz**, TU Berlin;

**Prof. Dr. Lars Ribbe**, TH Köln

*Introduction to PolyUrbanWaters Project*

Keynote Lecture

**Prof. Renee Y. Chow**, Professor, Architecture and Urban Design, Chair, Department of Architecture, Executive Associate Dean, College of Environmental Design, University of California, Berkeley  
*(working title) Water challenges in urban centers. Need for strategic tools.*

Speaker 2

**Frank Fladerer**, BORDA Regional Director, Bangkok Thailand

*Potential and challenges for polycentric approaches for urban water management in Southeast Asia*

Speaker 3

**Prof. Tony Wong**, Cooperative Research Centre for Water Sensitive Cities (CRCWSC),  
Melbourne, Australia

*Planning Water-sensitive Cities*

Speaker 4

**Barry Beagen**, Architect, Urban Planner and Program Director at Kota Kita, Solo, Indonesia

*Water challenges and participatory planning approaches in Indonesia*

Roundtable Discussion

**The current state of cities in Southeast Asia -**

**What barriers are there to achieving urban water security and the Sustainable  
Development Goals (SDG's)?**

PUBLIC SESSION 2

# Water for the Future in Southeast Asian Cities

10.15 - 11.45 (CET) / 16.15 - 17.45 (ICT)

Moderated by Prof. Dr. Lars Ribbe (ITT TH Köln) and Dr. Trinh Tran (VAWR)



## Introduction

Speaker 1

**Alexis Morgan (TBC)**, Team for the WWF Water Risk Filter, Berlin, Germany

*Mapping present and future water risks: the perspective of SEA*

Speaker 2

**Dr. Phong Tung Nguyen**, Vietnam Academy for Water Resources (VAWR), Hanoi, Vietnam

*Localisation of SDGs 6 and 11 in fast-growing cities of Vietnam: planning for a sustainable future*

Speaker 3

**Dr. Christof Vosseler**, The Ministry for Climate Protection, Environment, Mobility, Urban and Housing Development, Bremen, Germany

*How water-sensitive planning contributes to building resilience and climate change adaptation processes: experiences from a German case study*

Speaker 4

**Prof. Dr. Thammarat Koottatep**, Environmental Engineering Management, Asian Institute of Technology, Bangkok, Thailand

*Regulatory frameworks for (polycentric) water resources management: The case study of wastewater management in Thailand*

Roundtable Discussion

**What are the major obstacles to addressing water related risks in the planning of cities in Sout-East Asia and how can they be overcome?**

PUBLIC SESSION 3

# Global Perspectives on strategic planning tools and methods for sustainable futures



**12.00 - 13.30 (CET) / 18.00 - 19.30 (ICT)**

Moderated by Prof. Dr. Bakti Setiawan, Gadjah Mada University and Anna Wilk-Pham, Habitat Unit - TU Berlin

## Introduction

Speaker 1

**Prof. Dr. Bakti (Bobi) Setiawan**, Director - Graduate Program in Urban and Regional Planning, Gadjah Mada University, Yogyakarta, Indonesia  
*Challenges, potentials and emerging needs for different tools for sustainable urban planning in Sleman/Indonesia*

Speaker 2

**Rossana Poblet**, Architect and Urban Planner, UN Habitat consultant on Integrated Regional Development Plan, Berlin, Germany  
*Integrated urban planning strategies and planning and design tools - Lima Ecological Infrastructure Strategy*

Speaker 3

**Julian Petrin**, Urbanista, Hamburg, Germany  
*(working title) Planning for sustainable futures, urban transformation processes and future scenario development*

Speaker 3

**Arlene Lusterio (TBC)**, TAO Pilipinas, Manila, Philippines  
*(working title) Planning future cities: active participation of local governments and civil society. Experiences from the Philippines.*

Roundtable Discussion

**Putting words into action - what is the way forward to create resilient, water secure cities in Southeast Asia?**

Organised by



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