

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

# POLYURBAN WATERS

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

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Urban Water Resources in the World  
and in Southeast Asia

**Institutional challenges for polycentric approaches for  
urban water management in Southeast Asia**

**24-25<sup>th</sup>  
March 2021**

**Online /  
Berlin / Kratie /  
Sleman / Vientiane**

# THE GOAL TO REACH

## Output driven

**Output → single-sector perspective water supply :**

- Number of house connections
- Increased water production
- Waste disposal
- ...

towards



## Impact driven

**Impact → cross-sectoral perspective**

- Improved health
- Increased productivity (health, time,..)
- Increased live-quality
- Increased ressource efficiency (decentral close water cycle, reuse,..)



5 Building Blocks

Vision	Governance	Knowledge & Capacity	Planning Tools	Implementation Tools

How do we reach an interdisciplinary planning and cross-sectoral operation of infrastructure?

## Building Block: VISION

VISION/ MISSION: e.g.:CO2 neutral, affordable mobility, renewable energie,  
water wise citiy

How should your city look like...



*The municipality with it's different departments, stakeholders and reponsible entities for infrastructure should develop a common vision and missions as guidelines for urban planning and sustainable housing and infrastructure*

## Building Block: GOVERNANCE

Installation of an institution which is

- **responsible for Management and Operation of public Infrastructure**  
(Services of general interests)
- **responsible for support** of bottom up initiatives, communities, villages **with capacity and specific know-how**

Utility: Management and  
Operation of Infrastructure

### Start small - Identify Pilot Area: e.g. planning new quarter or living area

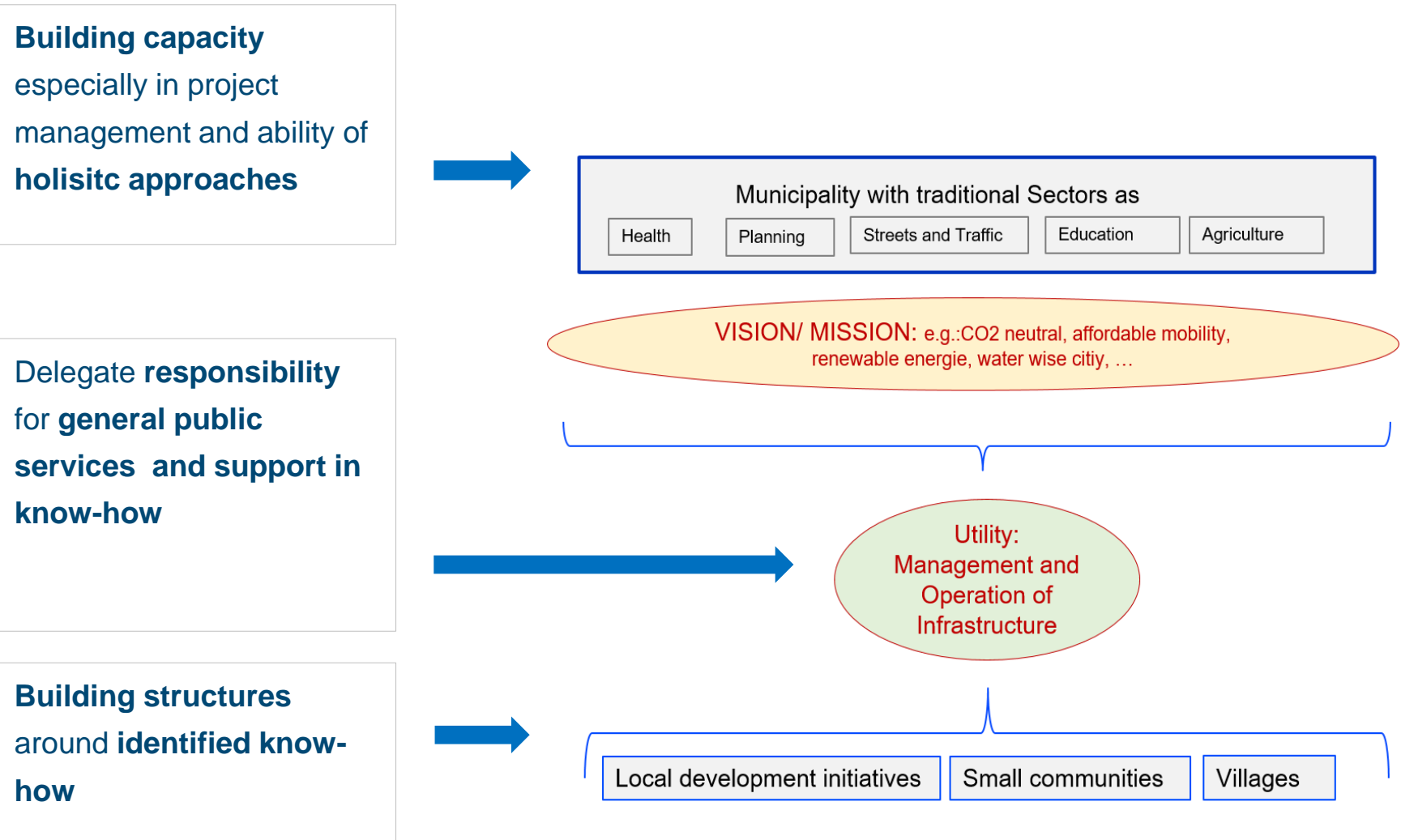
- Water demand and forecast needs
- Rainwater management
- Water Reuse
- Urban green
- Energy production and demand
- Agricultural needs
- ...



### Scaling up the experience

- Develop frameworks
- Technical standards out of technical competence
- Standards for cross- sectoral cooperation
- Co-production of stakeholders
- Efficient and professionalised operator structures

# Building Block: KNOWLEDGE AND CAPACITIES



## Building Block: PLANNING TOOLS

- Masterplan or **decision support systems**
- **Cross sectoral standards** and procedures

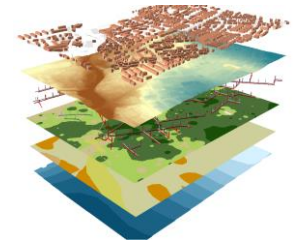
- **Asset management** and investment strategies
- Modelling tools to **enable forecasts**

- **Visualisation of concepts** through overlaying mapping
- **Sharing Data** and information



VISION/ MISSION: e.g.:CO2 neutral, affordable mobility, renewable energie, water wise citiy, ...

Utility:  
Management and  
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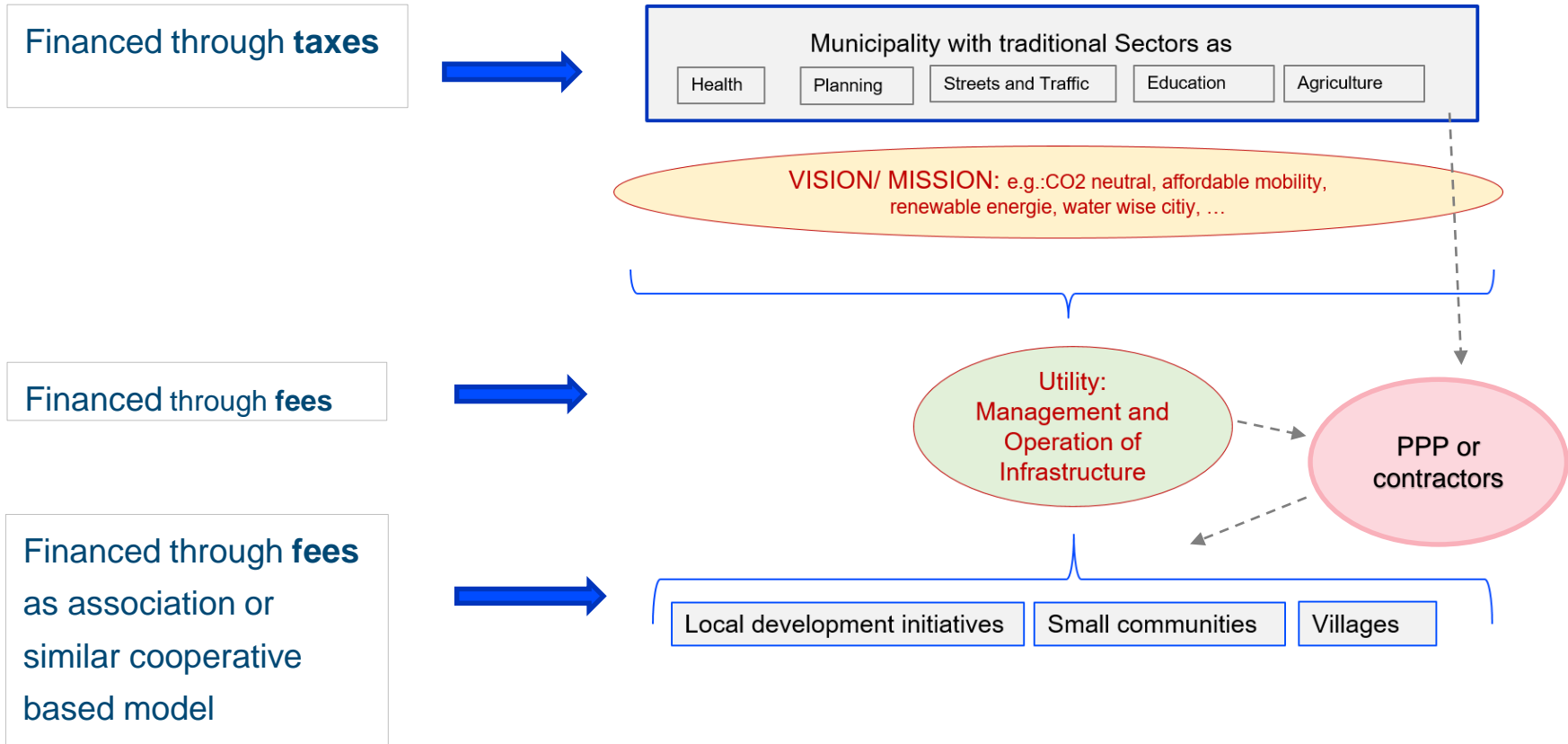


Local development initiatives

Small communities

Villages

# Building Block: IMPLEMENTATION TOOLS



# Example Hamburg – District Development

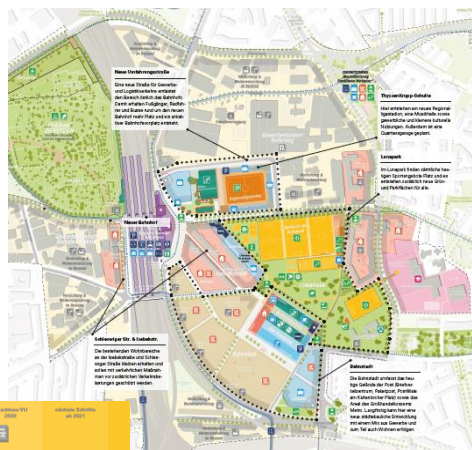


**VISION/ MISSION:** e.g.:CO2 neutral, new mobility, renewable energie, water wise city, ...

**Implementation Management Project group**

Regular cross sectoral working groups

Contracted Planning Consultants



Utilities for Water, Wastewater, Rainwater management, Electricity, Gas



Train Company



Private Investors

Local Citizens

Environmental initiatives

Local cultural/social initiatives

