

# PolyUrbanWaters SURE Status Seminar: Integrated Planning and Development

4th May 2022

Polycentric approaches to the management of urban water resources in South-East Asia



**POLYURBAN  
WATERS**

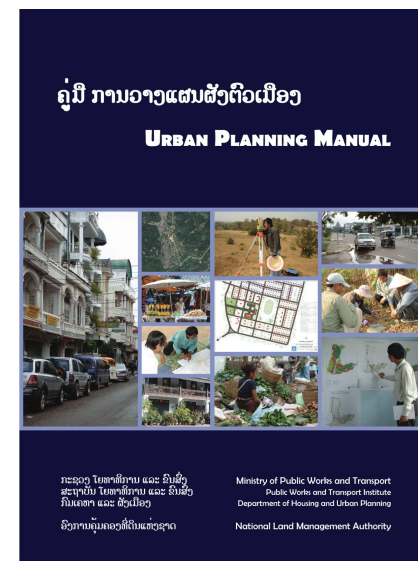
# Content

- I. Key challenges and main silos in PolyUrbanWaters Pilot Cities: experience from Sam Neua and Sleman
- II. Effective approaches for multisectoral and multilevel collaboration for integrated planning in selected case studies; and local acceptance, policy openness in multisectoral/multilevel collaboration

# Key Challenges

## Sam Neau, Laos

- **Prescribed** linear master planning approach centrally driven by a chain of government actors (lack of monitoring- evaluation - feedback)
- **Limited devolution of decision-making powers** for urban planning to local (municipal) departments
- Roles and responsibilities concerning urban planning **are spread across various central departments and ministries**; in reality there is a **blurring of roles and responsibilities and a lack of coordination**
- Involvement of other sectors and stakeholders takes place through limited **consultation with pre-selected line agencies** and stakeholder groups at set stages in the planning process - (i.e. 2 x commenting opportunities on draft urban plans)
- Public participation is through “**communicating plans**” rather than active involvement of the public in the planning and decision making processes
- Departments / Actors with greater economic strength / ability to act quickly are setting the scene for urban development - **often outside of formal urban plans and processes**



# Key Challenges

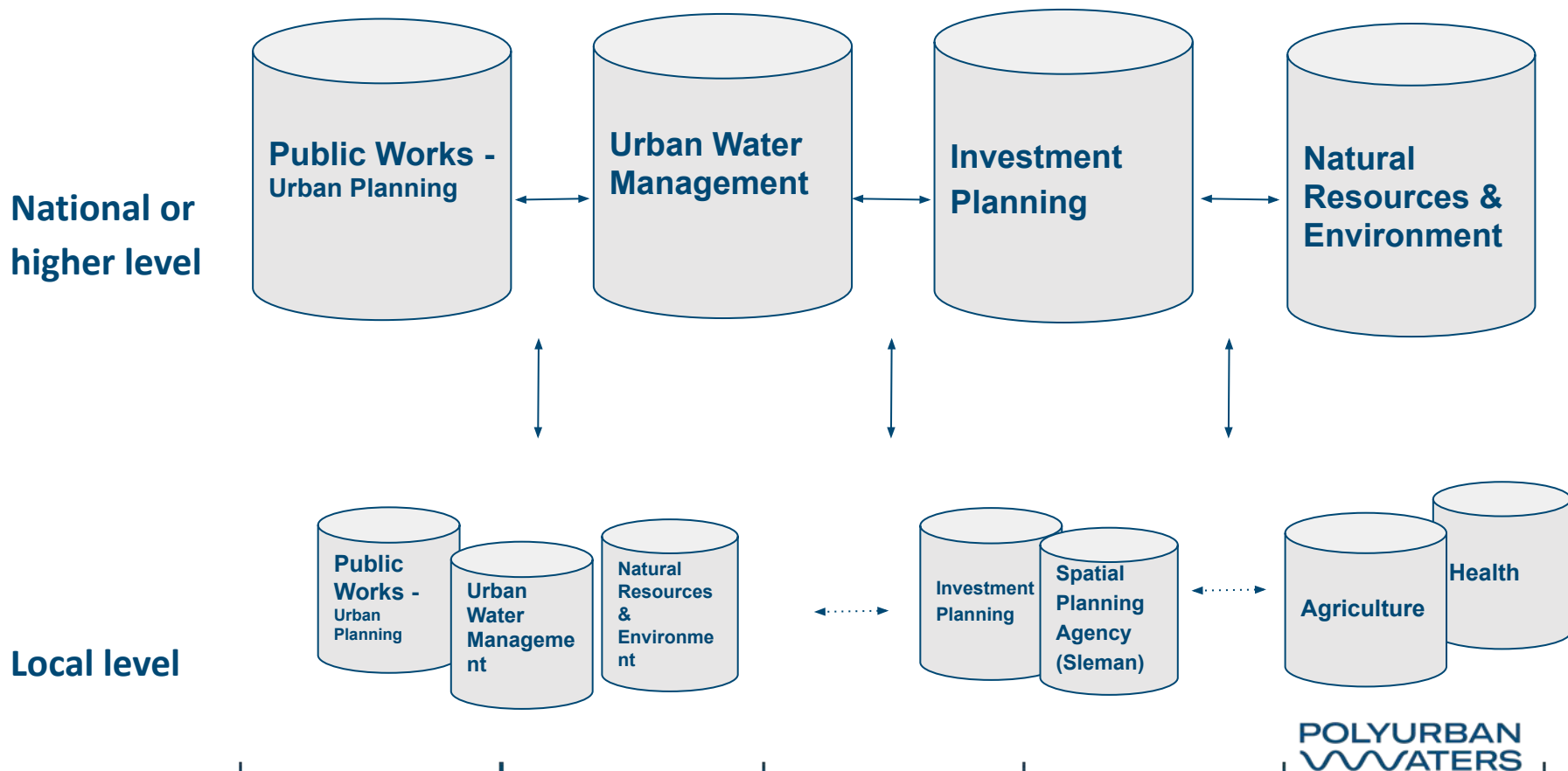
## Sleman, Indonesia

- The decision-making process takes place at the national, provincial and municipal level, but the actual implementation happens at the village level (the village has its own management structures) - the decisions are taken with **limited involvement of the actual local level implementing institutions**
- The city belongs to the Special Yogyakarta Region - the only remaining kingdom in Indonesia represented by the Sultanate's Palace and Royal Government, which gives the Sultan the right to **take final decision** e.g. about planned investments on city/village owned lands - the power and interest influence the local development
- The communities are involved in the planning processes to some extent (Musrenbag planning), but they **lack capacities to be engaged** (gap between national/provincial - municipal/ neighbourhood level)
- There are many roles and responsibilities concerning urban planning and its implementation which are spread across various provincial ministries, but there seems to be gap when it comes to responsibility after the implementation - **roles and responsibility shifting**
- the planning cycles seems to be clear, but in reality, the municipalities are running behind the planning trying to follow the national and provincial agendas which results in rather reactive than proactive planning

# Silos

Main Roles:

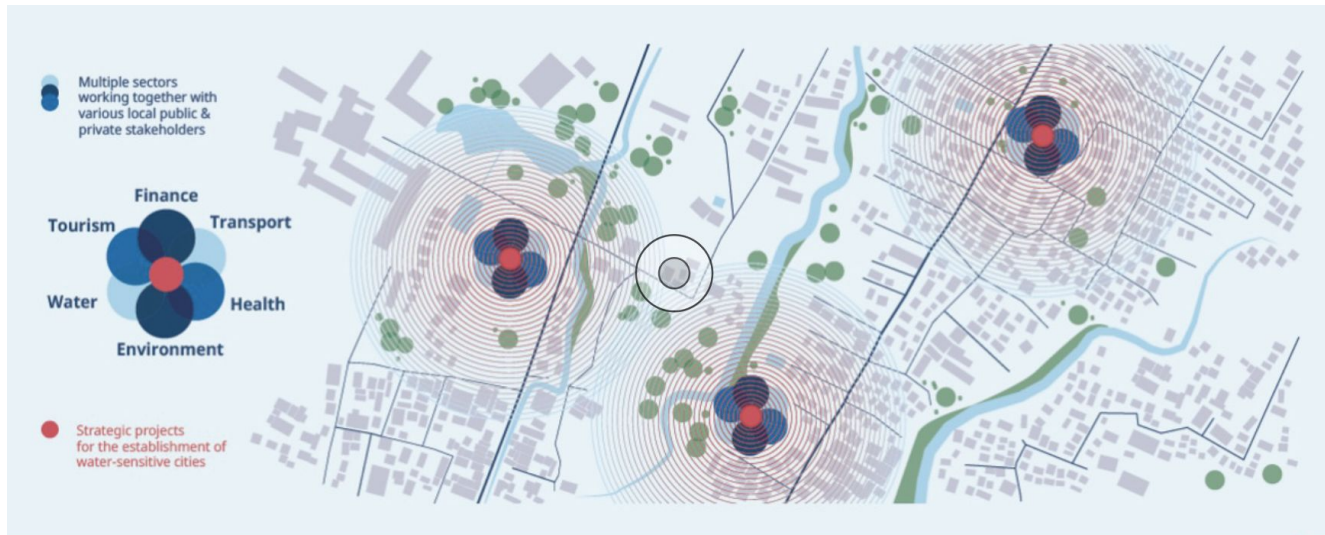
- Primarily Central and Provincial/ District Offices
- Less local municipal and Sub-local Offices



**II. Effective approaches for multisectoral and multilevel collaboration for integrated planning in selected case studies;**

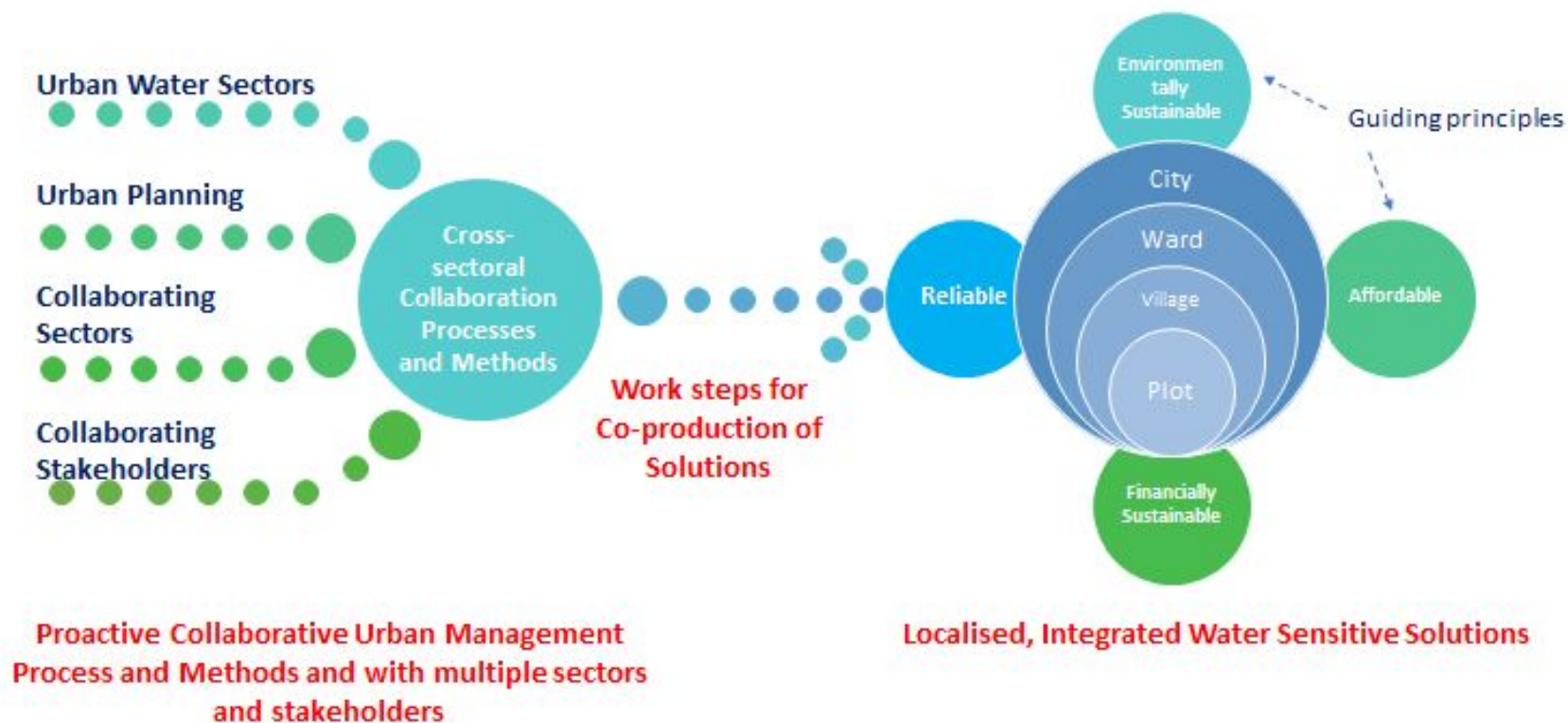
**and local acceptance, policy openness in multisectoral/multilevel collaboration**

## II: Components of Integrated Water Sensitive Urban Planning at the municipal level



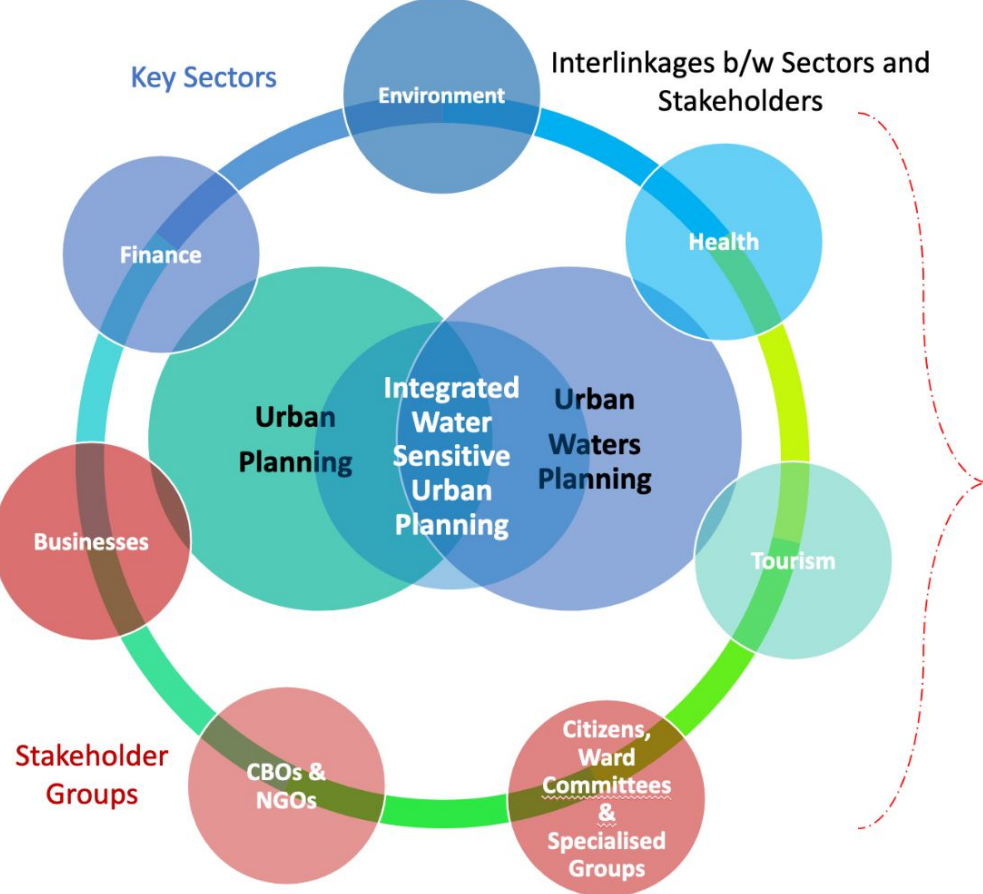
- Integrated, **cross-sectoral, multi-stakeholder** urban planning processes towards **unifying challenges/ themes/ needs**
- Co-production for Co-benefits
- Guiding principles for technical solutions: 1.Environmentally sustainable, 2. Financially Sustainable, 3. Affordability and 4. Reliability
- Decentralized infrastructure
- Adapting to ground realities and existing values, approaches, tools, methods, resources
- Incremental implementation

# Integrated Water Sensitive Planning and Development at the Municipal Level





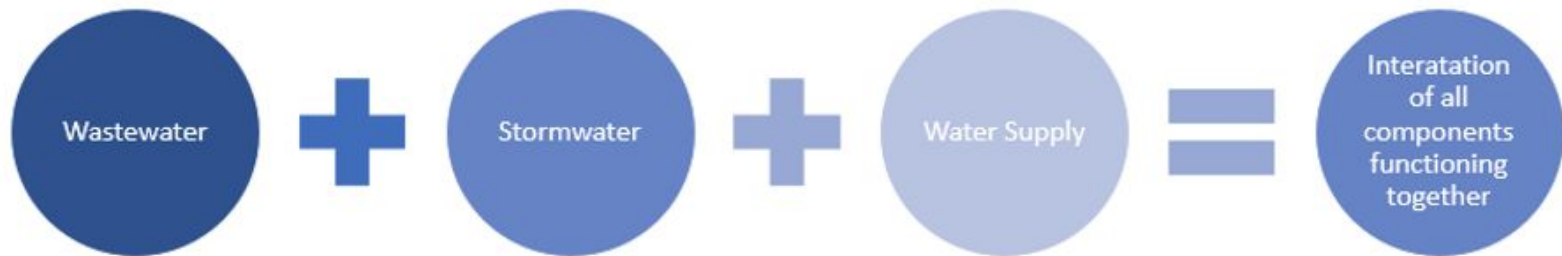
# Core sectors and collaboration for co-benefits



## Co-benefits for:



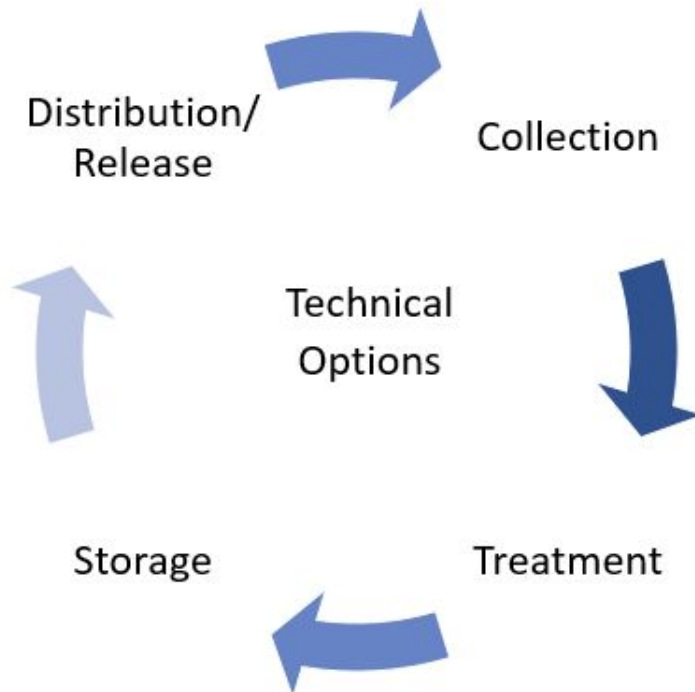
# Water Sensitive systems integrate all water management systems



~ Technical elements in each system link up and function together as a one

# Water Sensitive City

Integration of grey, blue and green infrastructure for storm water, waste water and water supply connecting up throughout the city.



# Main Components: Integrated, Water Sensitive Systems

While the following concepts are to be considered as *integrated packages* for water supply, wastewater, stormwater, they are presented individually in order to help focus on the individual systems. As a package, however they essentially seek to deliver 3 key outcomes as shown right:

## Technical Components

- Water Supply, Wastewater, Stormwater

## Ecosystem Services

- Multiple ecosystem services

## Co-benefits

- Range of co-benefits for different sectors

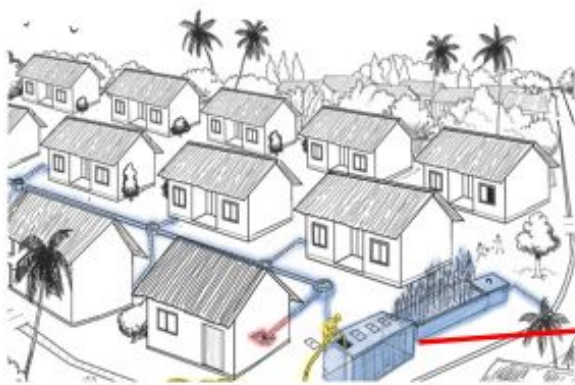
### Conceptual Framework and Components

| Water Supply   | Wastewater  | Stormwater   |
|--|---|--|
| <b>On-site stormwater harvesting and safe storage and efficient re-use of rainwater</b> <ul style="list-style-type: none"> <li>• Rainwater Tank</li> <li>• Underground Cistern</li> <li>• Water saving devices (fixtures and toilet)</li> </ul>  | <b>On-site treatment of grey and black domestic wastewater; Off-site treatment of sludge</b> <ul style="list-style-type: none"> <li>• Septic tank</li> <li>• Soak away</li> <li>• Groundwater recharge (safe locations)</li> <li>• Reuse on gardens or domestic agriculture</li> <li>• Diversion to stormwater</li> </ul> | <b>On-site retention; Slowed infiltration into ground water; Reuse</b> <ul style="list-style-type: none"> <li>• Rainwater tanks</li> <li>• Soak wells</li> <li>• Rain gardens</li> <li>• Permeable pavements</li> <li>• Vegetated Swales</li> <li>• Tree canopy</li> </ul> |
| <b>Ecosystem services at the micro level (plot)</b> <ul style="list-style-type: none"> <li>Water quality improvements</li> <li>Urban cooling and thermal comfort</li> <li>Support for biodiversity</li> <li>Reduced pollutant loads and urban runoff</li> <li>Reduced reliance on potable water</li> <li>Groundwater recharge</li> </ul> |   |  |
| <b>Co-benefits in:</b> <ul style="list-style-type: none"> <li>Health / Safety</li> <li>Environment / Habitat / Place and Community / Climate Change / Energy and Resources</li> <li>Private Finances / Local Economy / Tourism</li> <li>Food and Agriculture</li> </ul>  |   |  |

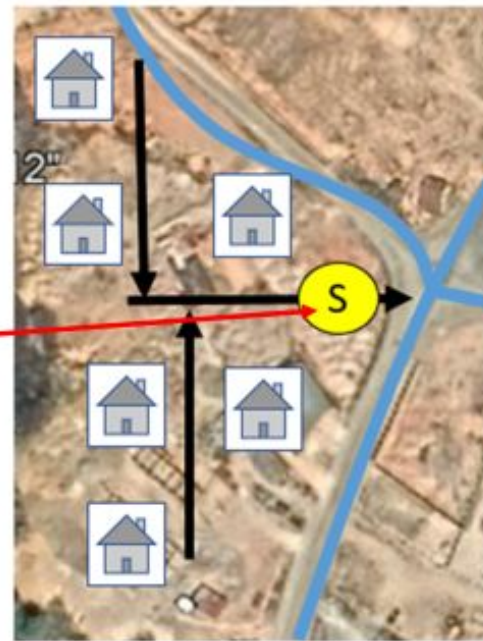
# Example: Integrated WS system for a new neighbourhood

## Off-site waste water treatment system for a small local neighbourhood housing cluster

- ~ small local wastewater facility connected to households via a simplified, shallow sewer network
- ~ portfolio of green + blue spaces with stormwater harvesting , storage, groundwater recharge and re-use
- ~ non-potable water supply and re-use on local open spaces and agricultural land in close proximity



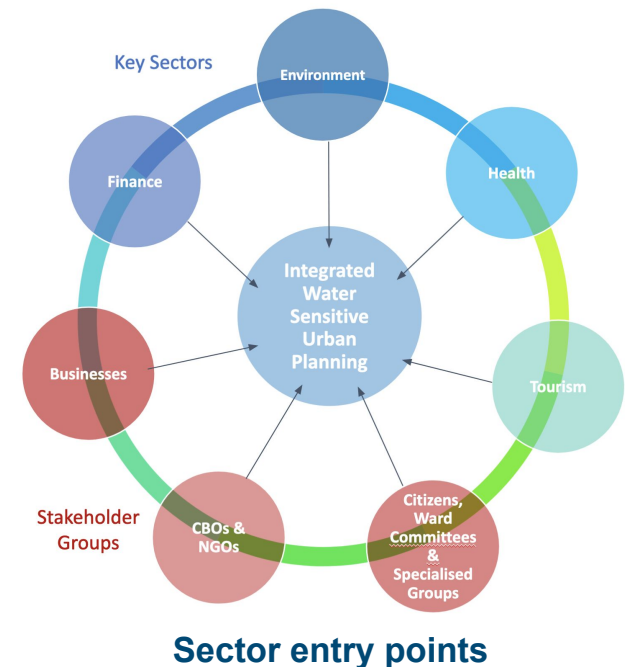
Example of simplified sewer pipes



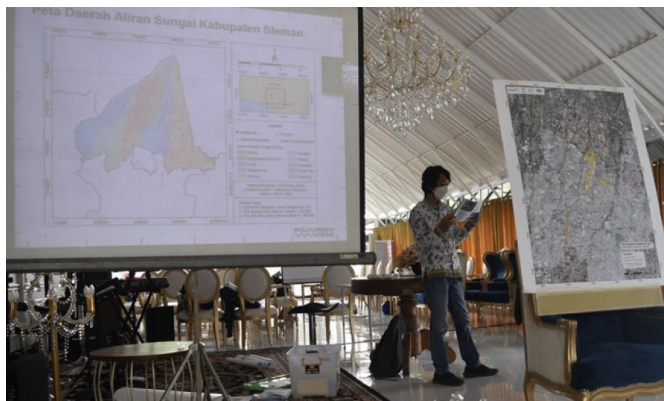
-  Small Sewage Treatment Facility  $\leq 8\text{m}^3/\text{d}$  underground (grey water, fecal sludge)
-  Residential Lot / Single House
-  Small /simplified sewer lines
-  Stormwater Drainage

## Effective approaches for multisectoral and multilevel collaboration for integrated planning at the municipal level

- Cross-sectoral cooperation between local departments is already required on paper; improving effectiveness involves **strengthening devolution of decision-making power for practical execution to local levels** → improve collaborative working processes and structures
- **Improving clarity of the existing roles and responsibilities** is still needed between local government units and further opening the participation of different stakeholders (private households, investors, villages, communities, etc.) in planning and implementation.
- For the various Development Plans (Socio-Economic/ Land Use), a planning approach that mandates/ **enables different sectors and stakeholders to identify entry points and promote actions that address their needs**

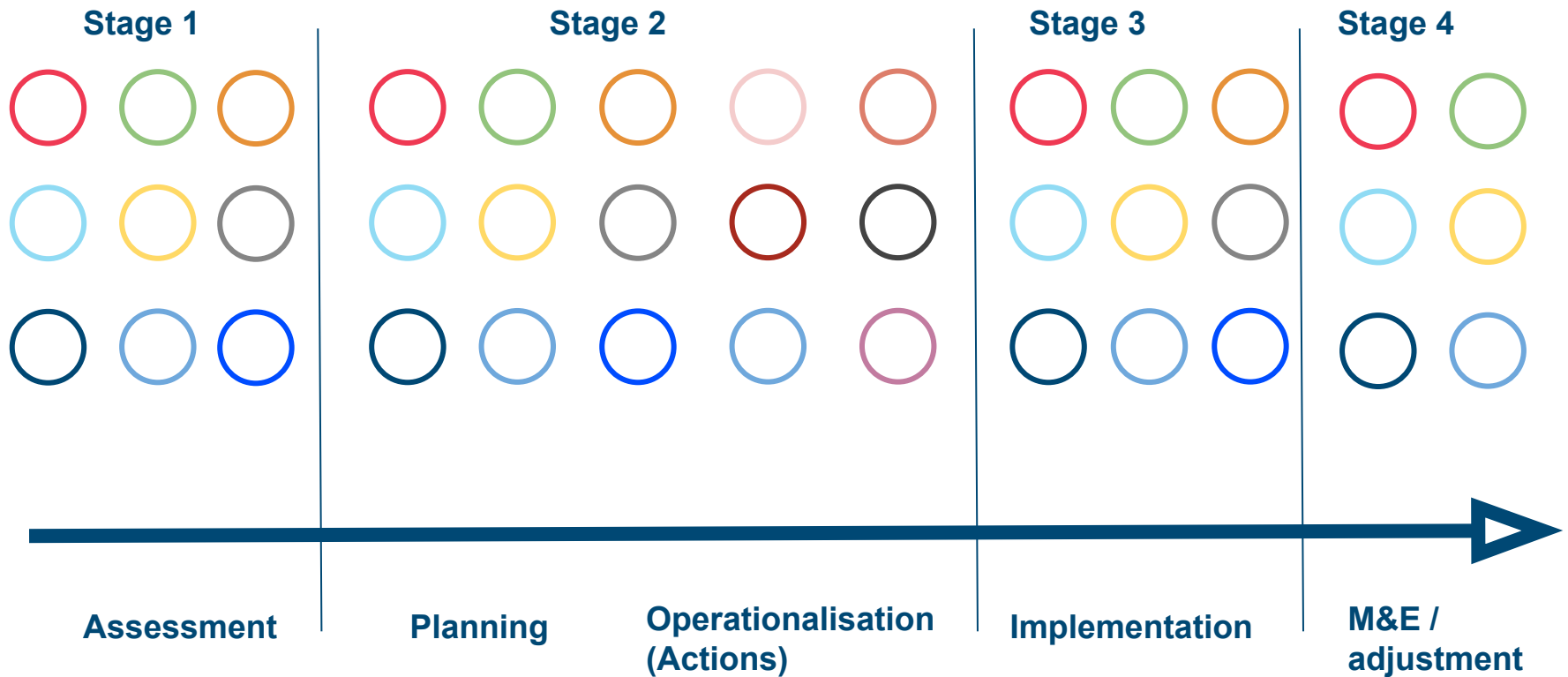


- **Appropriately phased/staged involvement** of particular sectors and stakeholders collaboration in the planning process initiation, planning, implementation, monitoring, evaluation, feedback from all relevant sectors/actors
- Proactive urban planning and its effective implementation through **public authorities and strong participation from investors and community representatives** is needed to realise City's vision for its development.



# Collaboration in planning process: context-tailored, staged engagement of sectors and stakeholders in line with local formal planning protocols

 Various core and collaborating sectors and stakeholder groups



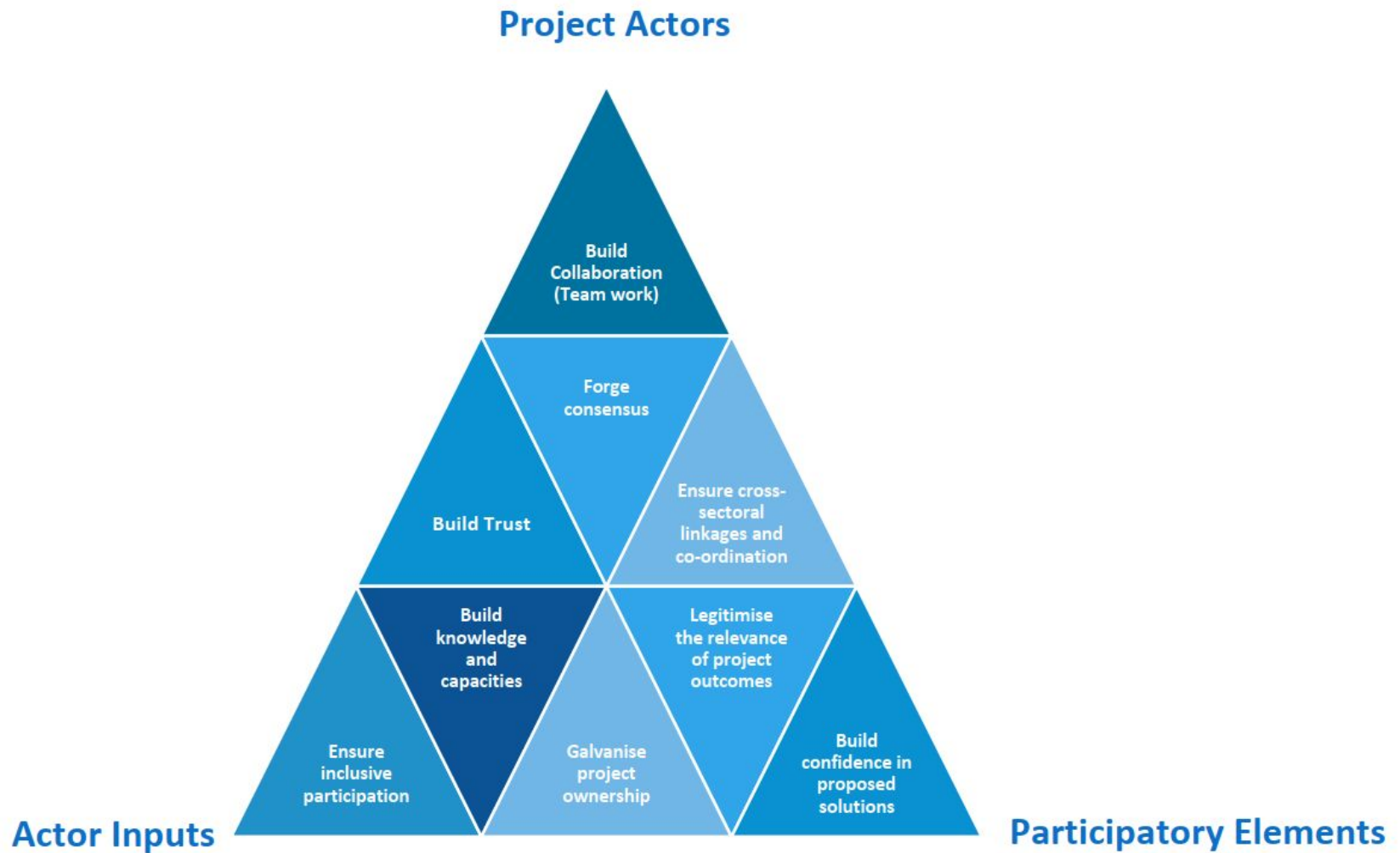
Different gradients of participation: Inform, Consult, Involve, Collaborate, Empower



## Desirable characteristics of integrated urban planning in terms of local acceptance, policy openness

- Tailored to individual context
- Appropriate gradients of participation at different stages: inform, involve, collaborate, empower
- Workable, feasible format for inter-sectoral co-operation
- Common Goals: problems / solutions
- Recognition of and building on/connection with local existing processes, values, sensitivities, relationships/partnerships
- Appropriate level of autonomy for local decision making, politically backed by centre
- Sharing: benefits; knowledge; resources; joint funding; skills; capacities
- Transparent roles and responsibilities (equal )
- Circular planning process (feedback loops and flexibility for adjustments)
- Co-benefits that achieve buy-in and ownership by sectors and stakeholders
- Compatibility of technical solutions
- Correct and context-specific language and definitions
- Long term planning horizon: concerted commitment to approach over time, beyond singular development projects

# Combined objectives of integrated planning approach



**Thank you for your attention**  
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