



Better Urbanization for Better Water Outcomes

Why Urban Planning Matters for Water

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Global Water Operators' Partnerships Alliance

Smart solutions in water and waste management for liveable cities Seminar

Stockholm World Water Week

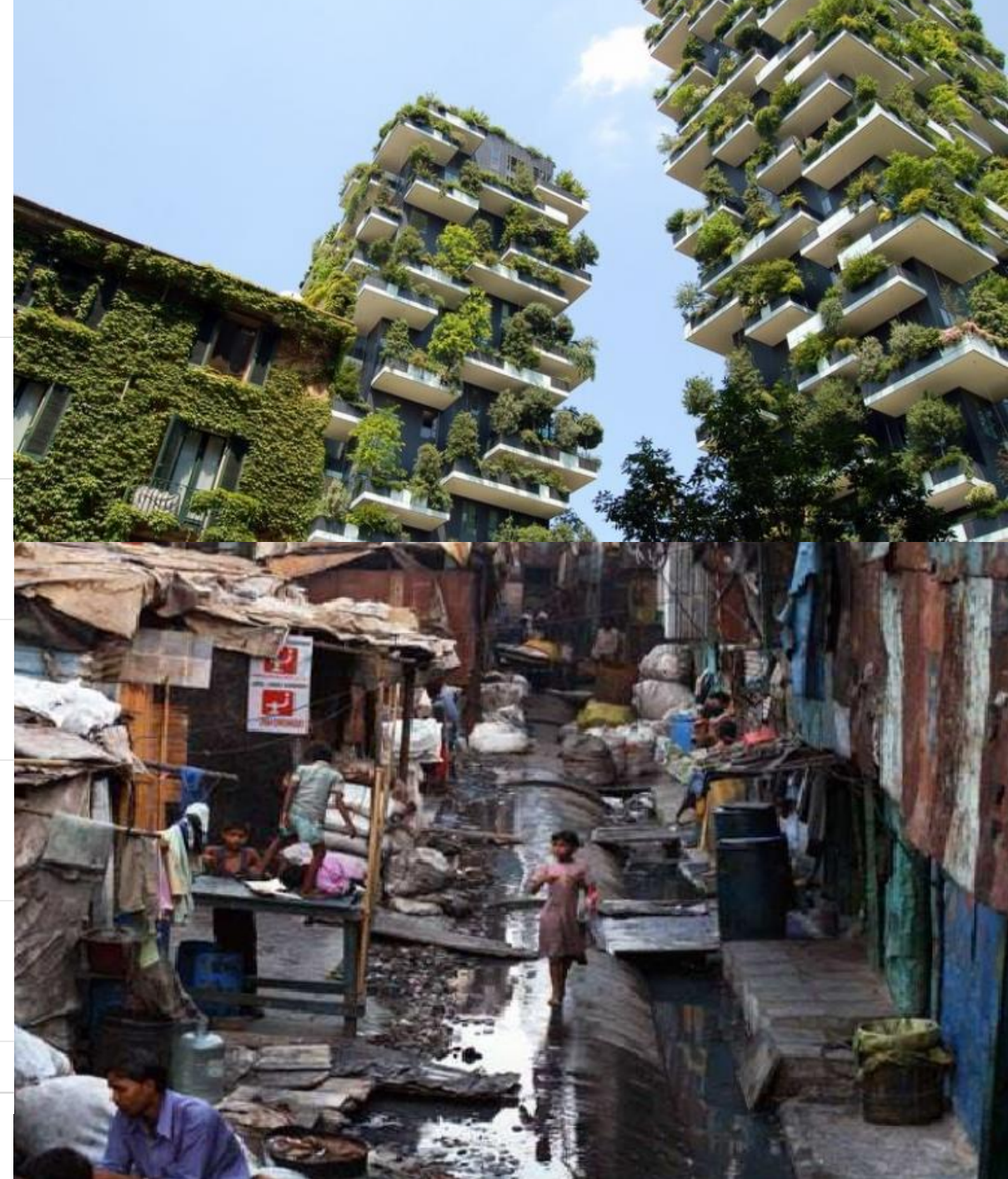
Wednesday, August 30th, 2017





“The battle for sustainability will be lost or won in cities..”

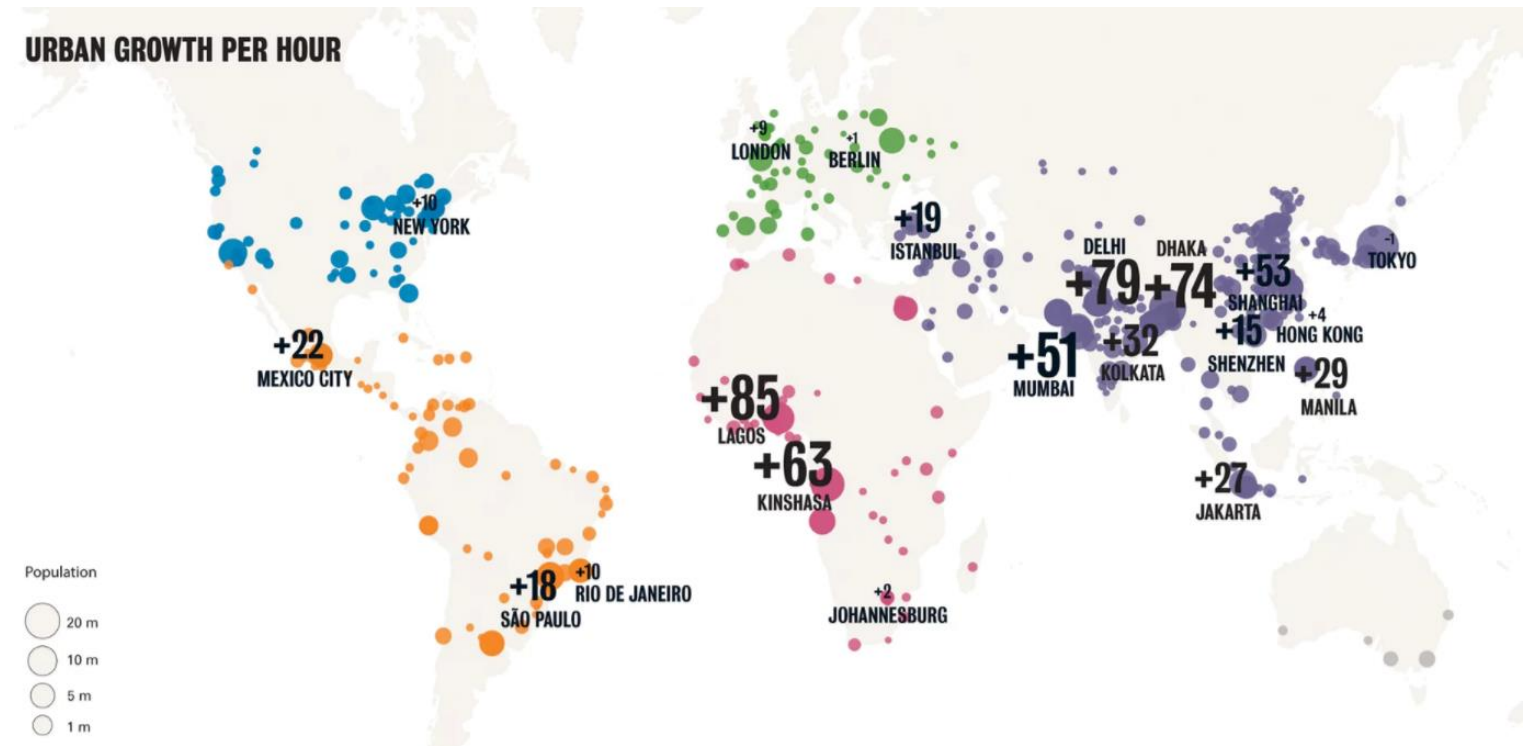
From Great Challenges to Great Opportunities



Urbanization Global Trends

- 54% urban world
- Pace 11x faster in Africa than Europe
- Secondary Cities > Megacities
- Population doubling 2010 – 2050

- Little good planning – laissez-faire results
- Growing socio-economic inequalities
- Inordinate consumption footprints
- Inordinate economic value



<https://www.theguardian.com/cities/2015/nov/23/cities-in-numbers-how-patterns-of-urban-growth-change-the-world#img-1>



Urbanization Global Trends

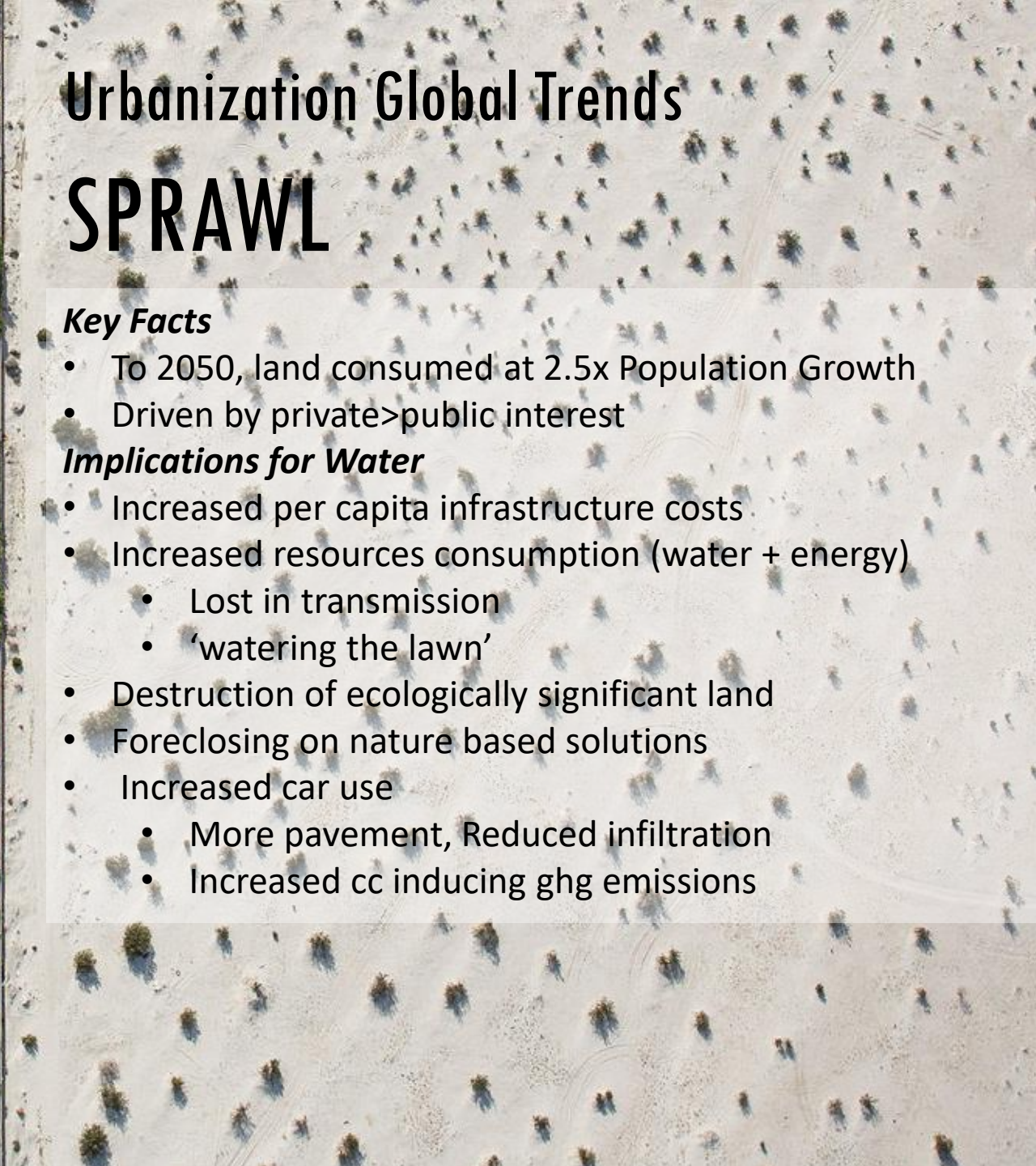
SPRAWL

Key Facts

- To 2050, land consumed at 2.5x Population Growth
- Driven by private > public interest

Implications for Water

- Increased per capita infrastructure costs
- Increased resources consumption (water + energy)
 - Lost in transmission
 - 'watering the lawn'
- Destruction of ecologically significant land
- Foreclosing on nature based solutions
- Increased car use
 - More pavement, Reduced infiltration
 - Increased cc inducing ghg emissions





Urbanization Global Trends

SLUMS

Key Facts

- Poor construction, insecure tenure, cramped conditions, lack of services
- Typified by poverty and precarity
- Urban Africa close to 70% slums

Implications for water

Costly, risky and physically challenging to serve
Environmentally precarious

- risk to residents health and safety
- Ecological services



Urbanization Global Trends

FRAGMENTATION

Key Facts

Spatial fragmentation of natural systems, land uses and classes

Implications for Water

Loss of ecosystem function

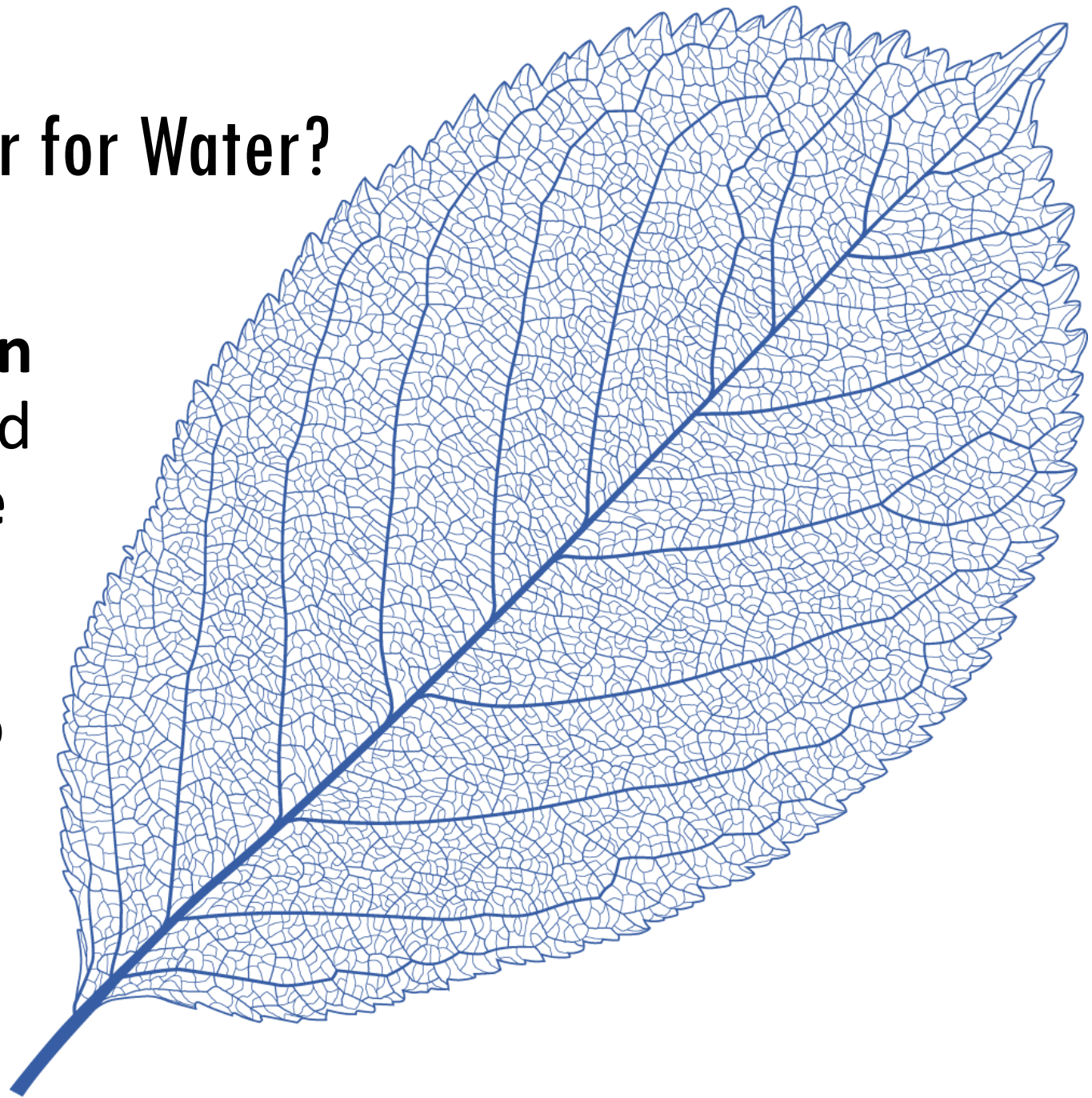
Social acceptance of spatial injustice – (Muthaiga vs Mathare)

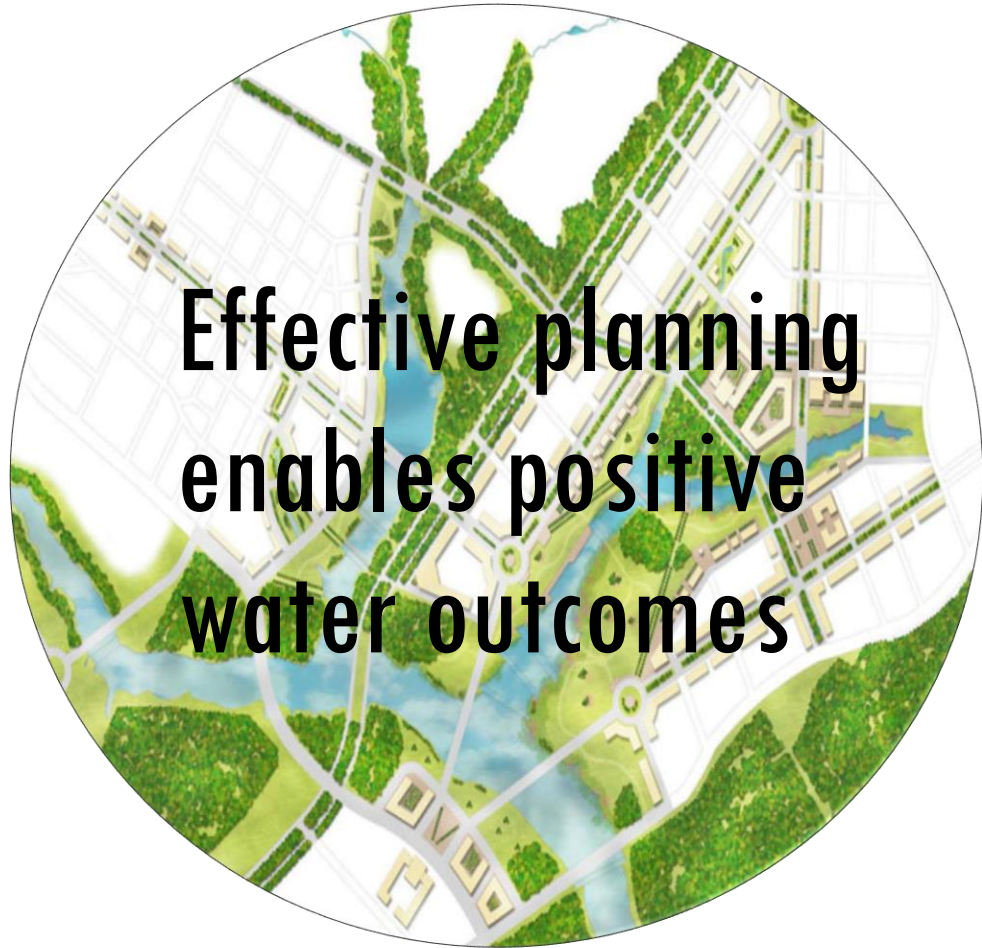
Entrenchment of social divides



Why Does Urban Form Matter for Water?

Urban form and infrastructure choices **lock in** socially, environmentally and economically **unsustainable water outcomes** and diminish the potential of cities to serve as solutions to water challenges.

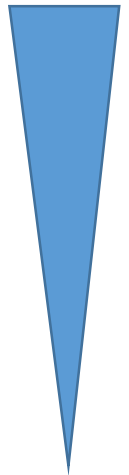




Planning Principles that Favour Water Outcomes

- Compact and Contained Urban Form
- Preservation of Natural Spaces
- Intensification of urban nodes
- Landscape mosaic
- Mixed-use
- Permeability
- Capture and reuse resources and technologies
- Nature-based infrastructure
- semi/de-centralization

City level



Site level



Contemporary Planning Practice...

- Integrates sectors
- Considers all scales
- Participatory
- Inclusive
- Strategic
- More than a technical tool
- Embraces Sustainability
 - ✓ long time frames
 - ✓ Social, enviro & financial

The New Urban Agenda and the SDGs

5 GUIDING PRINCIPLES FOR THE **NEW URBAN AGENDA**

- 1 > Urbanization protects and promotes **HUMAN RIGHTS & RULE OF LAW**
- 2 > Ensure equitable urban development
- 3 > Empower civil society, expand democracy
- 4 > Promote environmental sustainability
- 5 > Promote innovation & learning

SUSTAINABLE DEVELOPMENT GOALS



Global



Local

Water Actors moving the New Urban Agenda forward

- Embrace the opportunities of cities
- Beware the Buzzwords!
- Engage in PLANNING
- Go beyond your sector
- Seek local solutions to global challenges
- Share solutions with others!

- Leave no one Behind



Recycling Inclusive
Innovative
reuse smart
Smart
Réuse
Holistic

Thank you