ICLEI
Local Governments for Sustainability
AFRICA

Urban Water Resilience as a Social Good

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ILASA/IFLA Africa Conference

ICLEI Local Governments for Sustainability AFRICA

ICLEI'S

REACH

ICLEI – Local Governments for Sustainability is a global network.

We have put 'urban' firmly on the sustainability agenda, working with and effectively advocating for local and subnational governments in the global arena for

30+ years

Working with

2500+

local & regional governments

Active in

125+

countries

WEBINAR SERIES

CitiesWithWater

TOO MUCH

Local Governments for Sustainability

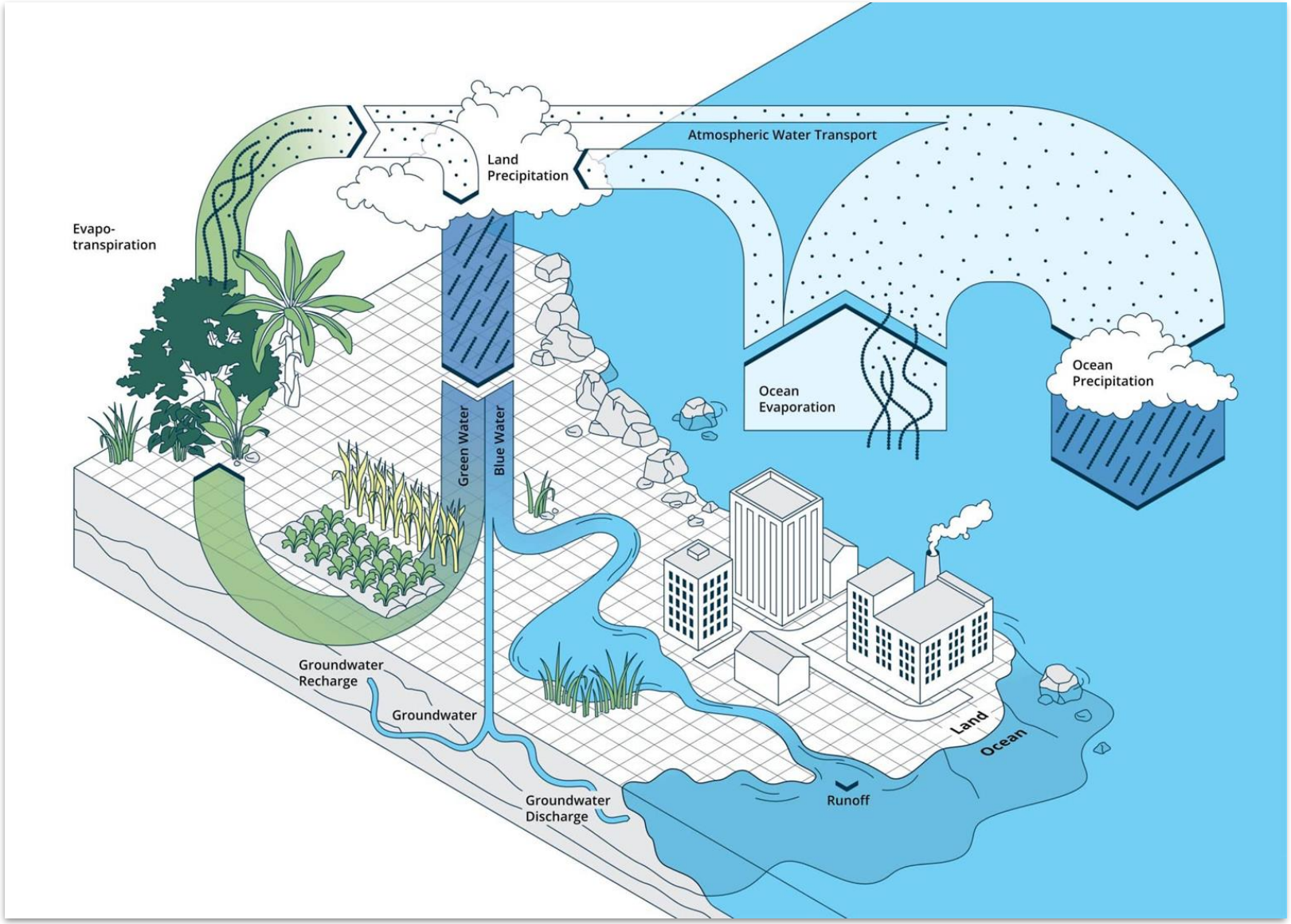
Water:
Too little, too much or too dirty...

(Prof Kader Asmal – Minister of Water in South Africa 1994-1999)

A conceptual illustration of the hydrological cycle (source: Global Commission on the Economics of Water)

- Average residence period globally:
- Water in the atmosphere: days to weeks
- Water on land: 1-6 months
- Water in the ocean: 3,500 years

The only part of the global hydrological cycle over which we exercise any control is while a drop of water is on land



Water Hazards – where lies the blame?

- Increased pressure on natural hydrological infrastructure due to settlement – floodplains, buffer zones, paleo channels, wetlands, aquifers etc.
- Replaced by housing, carparks, shopping malls, roads, concrete canals etc.
- Cycles of floods & droughts impact the city as a whole as well as specific local areas with water quality issues increasingly pressing
- The hydrological cycle has been altered by climate change – faster, more intense precipitation
- Investments needed in #slowwater
  - Keep water in the upper catchment through improved infiltration into soils
  - Slow the progress of water through preservation of wetlands and floodplains in the city and in the catchment
  - Promote natural cycling and uptake of nutrients through biodiversity preservation and restoration

Water & Cities

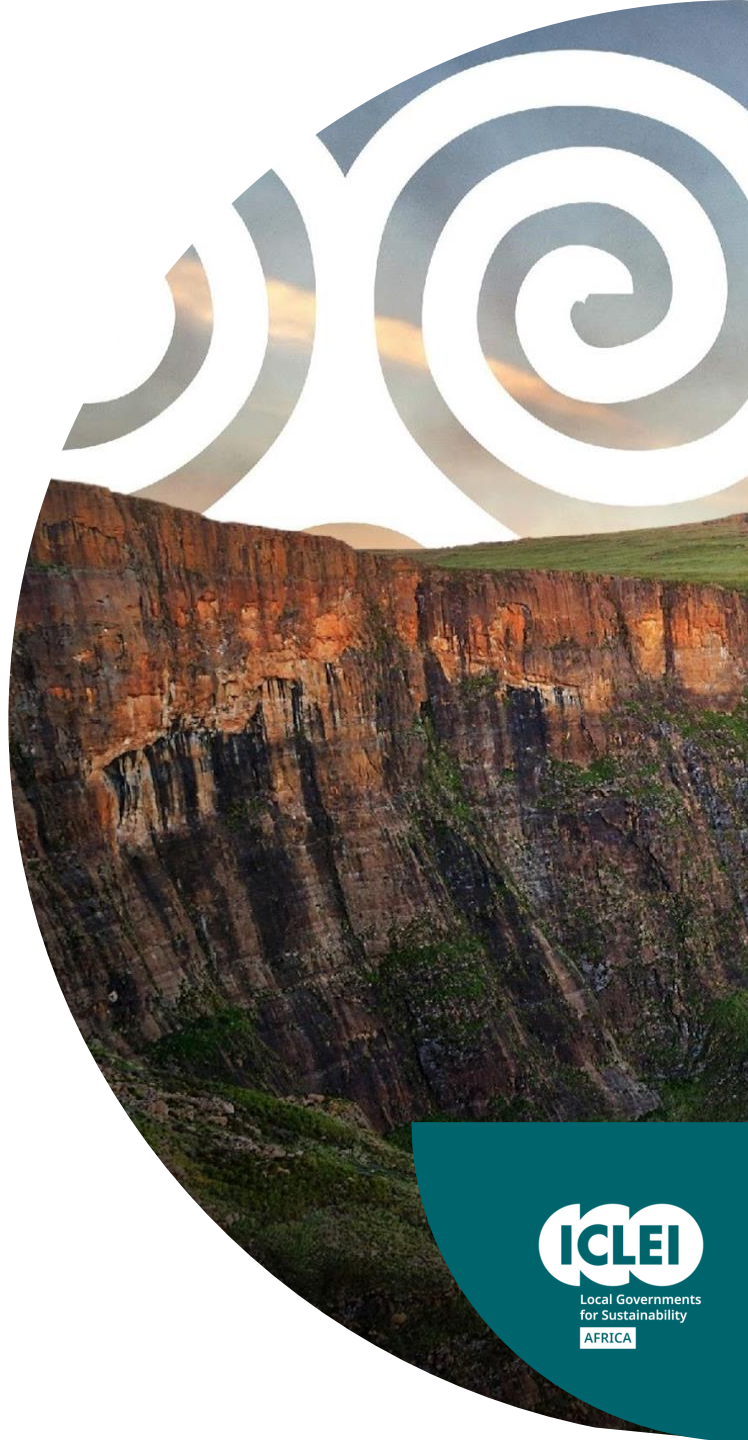
- Access to water for all is a human right,
- Majority of the planet's population is urbanised
- Africa has the fastest urban growth rate in the world – by 2050, Africa's urban areas will be home to an additional 950 million people.
- Cities account for 80% of economic activity driving demand for water and producing effluent flows
- Cycles of floods & droughts impact the city as a whole as well as specific local areas
- The hydrological cycle has been altered by climate change – faster, more intense
- Investments needed in #slowwater

Cost of Water Insecurity

Key findings of the Global Commission on the Economics of Water:

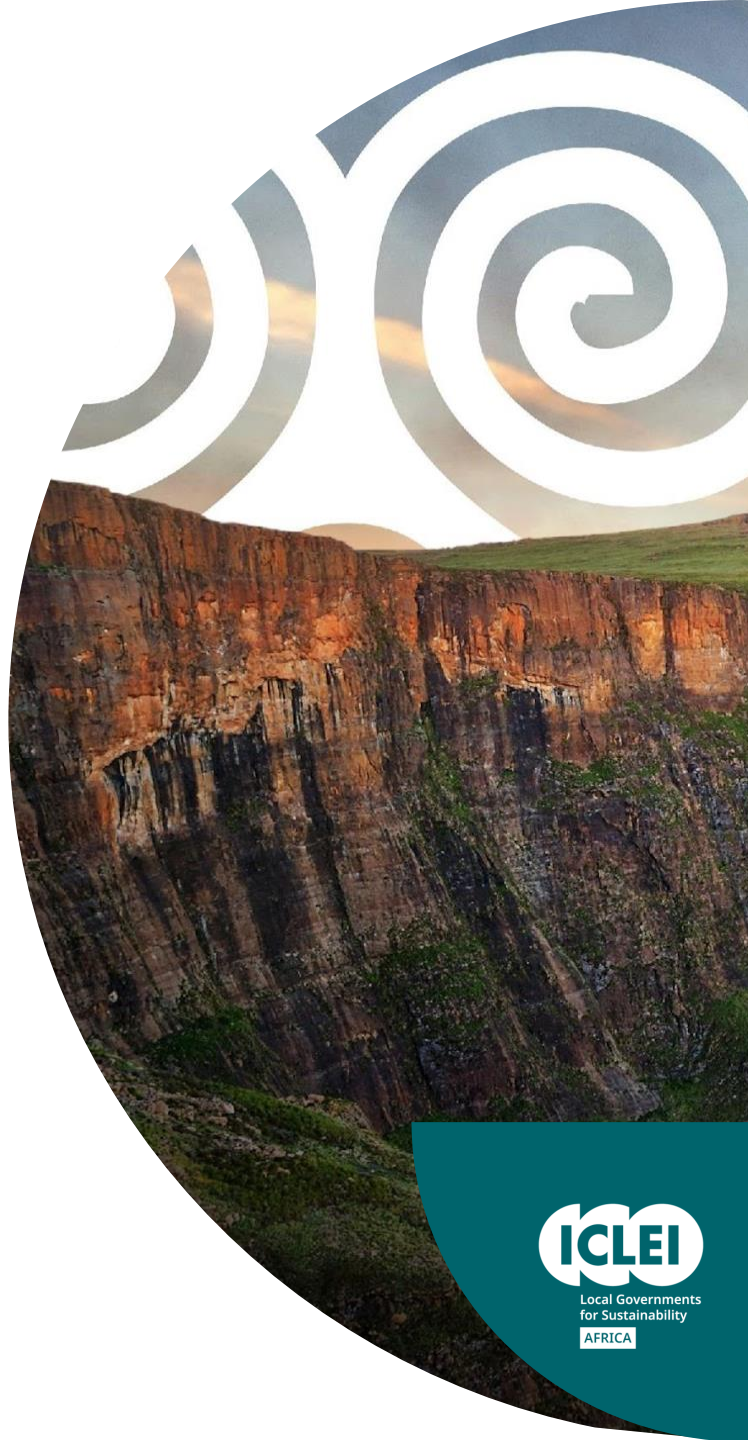
- >1,000 children under 5 **die daily** from unsafe water and sanitation
- Women & girls spend **200 million hours/day** collecting water.
- Food systems are running out of fresh water - rainfed + irrigated
- Cities are **sinking** as the aquifers underneath them run dry
- Nearly 3 bil people & >half of the world's food production in areas where total **water storage** is projected to decline
- Lack of water availability shows **GDPs shrink** by 8% by 2050 on average, while lower-income countries could face even steeper declines of between 10% and 15%
- Increased costs of urban flooding

Environmental Impacts = Social Impacts = Economic Impacts



Funding a Water-Secure Future

- An Assessment of Global Public Spending, released by the World Bank 6 May, 2024 provides the first global sectoral overview of what is needed to bridge the gap to achieve SDG targets
- To achieve the SDG targets for universal access to safe water and sanitation, the world is experiencing an annual spending shortfall of between **US$131.4 billion and US$140.8 billion**.
- Overall, annual spending in the water sector for **developing countries is about US$164.6 billion**, which is just about 0.5% of the total GDP.
- 91 percent of the annual spending on water above comes from the public sector, only **less than 2 percent** comes from the private sector.
- Despite large spending gaps, the water sector is not able to spend all the allocated budget. The annual budget execution gap is about 72%.



WEBINAR SERIES

CitiesWithWater

ICLEI
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Urban Water Resilience

Values

Human Right to Water and Sanitation

Ecosystem Health and Resilience

Value of Water

+

Connections

Urban-Catchment Links

Ecosystem Connectivity

Stakeholder Participation and Engagement

Inter-sectoral Collaboration

+

Investments

Infrastructure Development

Nature Based Solutions

Project Preparation

Knowledge, Institutions and Capacity

Landscape management - at scale

- In Africa 90% of farming is rainfed
- Soil erosion causes sedimentation of rivers
- Hard surface reduces infiltration of rain into groundwater
- Conservation agriculture can capture up to 90% of all local rainfall
- Replenish aquifers, trap sediment
- Soil moisture retention capacity & organic carbon content are positively correlated
- Farmers as frontline water managers - but they are not compensated for this task

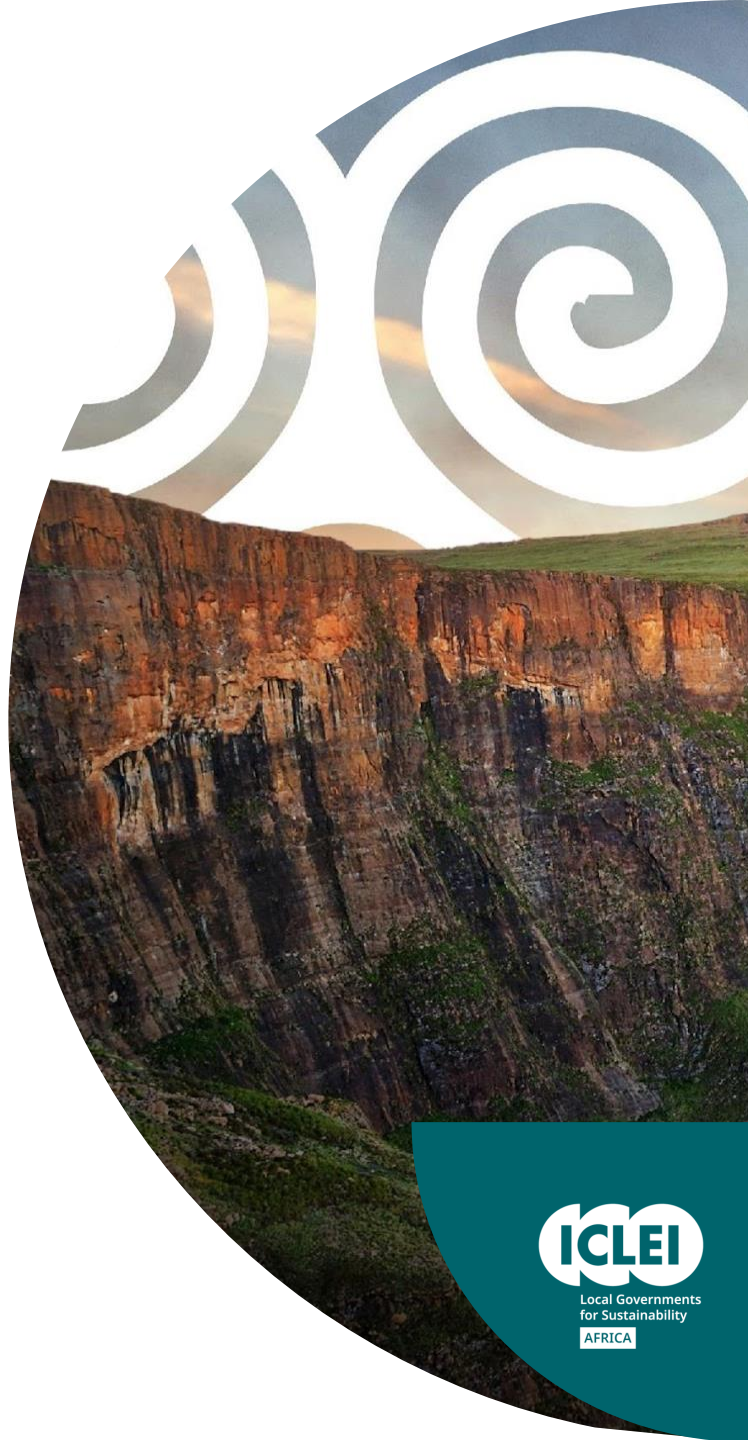
Opportunity in Malawi

- Lunyangwa River in northern Malawi is part of the water supply system for the city of Mzuzu (pop 400,000) by the Northern Region Water Board
- Due to deforestation and increased settlement in the upper catchment sediment levels and turbidity have increased leading to higher water purification costs & siltation of Gulliver Dam
- Coupled with the changed climate flooding has become a major problem for communities downstream – altering the river channel
- Rainfed farmers struggle to produce crops leading to rural-urban migration
- Now implementing community based landscape restoration solution developed by a local NGO (Tiyeni)
- Includes improved agriculture practices, and protection and restoration of wetlands and buffer zones
- Idea is to take the watersource protection trust fund model and apply it to a rural area, covering 20,000 farmers
- NRWB has committed to cover long term O&M costs of the scheme is the capital investment can be covered
- Implementation of 3 years at a budget of around 750,000 USD = 37 USD per farmer
- Investment case will be established through empirical data measuring sediment, groundwater, streamflow
- ICLEI is working with local partners to scale out to other water boards & cities in Malawi

Conclusions:

Access to Climate Finance for Cities

- Impacts of climate disasters are sudden and unfairly affect the poorest of society who are often unable to respond
- City governments are the frontline first responders to the impacts of a changed climate
- Climate finance needs to be directly, and easily accessible by sub-national governments, and processes to access finance should be streamlined
- Deserving urban water projects exist – but are not considered bankable by DFIs due to:
  - Small ticket sizes – typically 2 mil USD in African cities where 10 mil USD needed
  - Lack of business case development
  - Capacity to pay of served population not established
  - Value and pricing of water and landscape services not well established



CitiesWithWater PHOTOGRAPHY EXHIBITION

- Photos showing water being either too little, too much, or too dirty
- 16 shortlisted entries can be viewed online

https://citieswithnature.org/citieswithwater/

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