

Adopting Integrated Urban Water Management

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India Pavilion

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Ministry of Environment, Forest and Climate Change
Government of India

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India's Water Sector Scenario

India is blessed with an abundance of water resources and large rivers, but still it is currently facing the terrifying possibility of becoming a water scarce country by 2025.

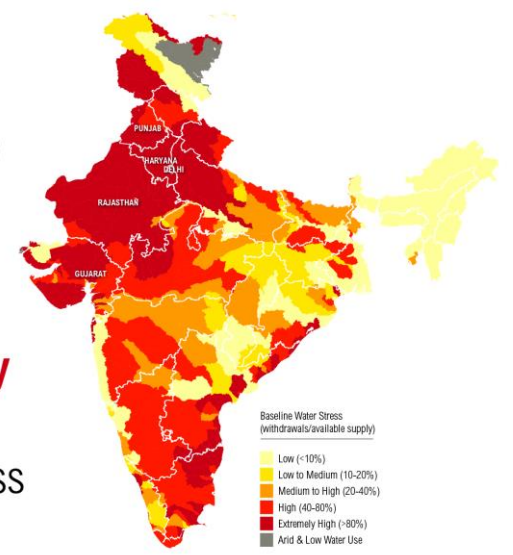
India is placed at 120th amongst 122 countries in the water quality index, with nearly 70% of water being contaminated

600 million Indians face high to extreme water stress and about 0.2 million people die every year due to inadequate access to safe water

The water requirement by 2050 is likely to be 1,180 BCM, whereas the present-day availability is 695 BCM

Cities are **key in addressing climate change** through integration of water energy nexus & climate resilience strategies into local development planning.

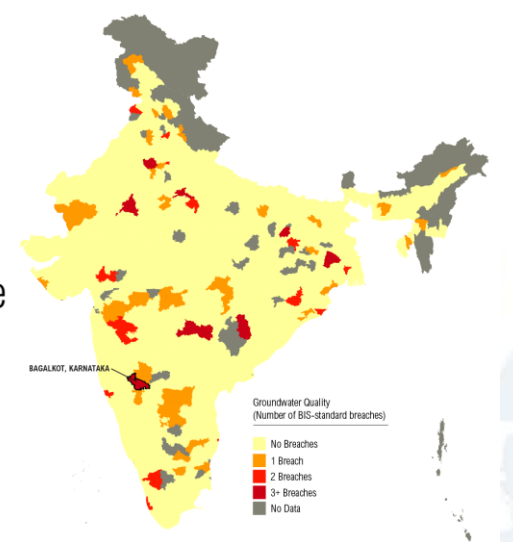
54%
of India
Faces
**High to
Extremely
High**
Water Stress



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More than
**100
MILLION**
People Live
in Areas of
Poor Water
Quality



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INDIAN CITIES AND WATER SECTOR



Ministry of Environment, Forest and Climate Change
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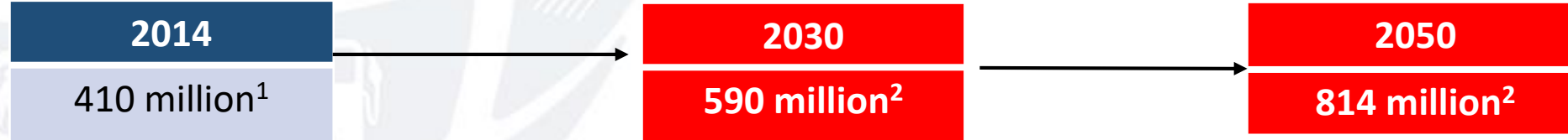


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Indian Cities Population



US\$ 1.2 trillion in capital investment required over the next 20 years to meet urban services demand

Equivalent to **\$134 per capita per year**, almost eight times the level of spending today¹

- ❑ Climate risks to Indian Cities - heat stress, inundations, **water shortages, droughts, environmental health risks** and migration to urban areas.



¹ World Urbanisation Prospects 2014 UN Report, ² Mckinsey Global Institute. ³Revi, A (2005).



Background

Most of the cities bring water from distance sources (average 100km – 200 km) resulting in high NRW.

Only 70 per cent of the urban households have access to piped water supply

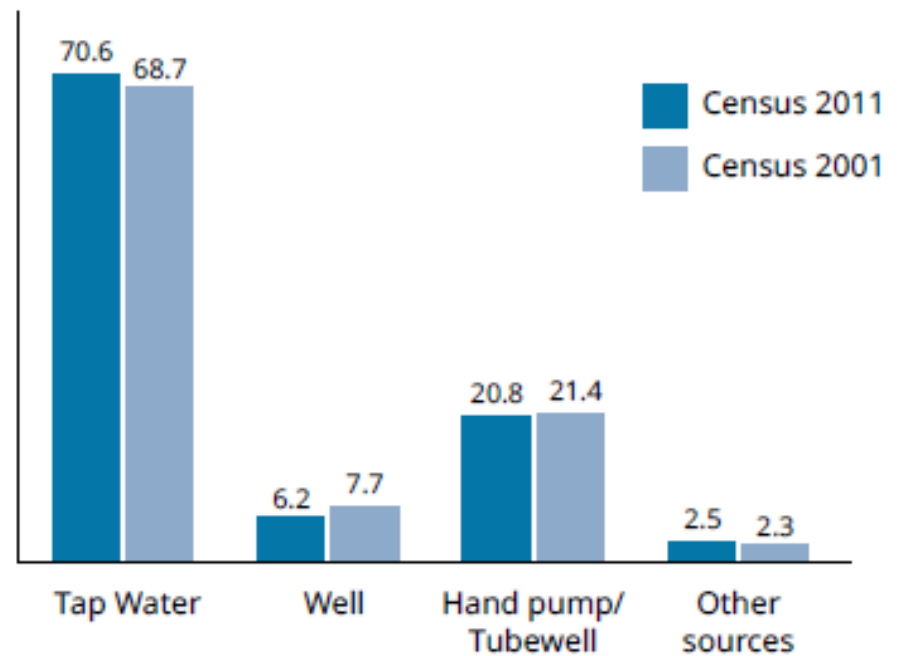
Though the per capita availability as reported ranges from 90 to 120 liters per day, but no city yet offers continuous water supply

More than 40 percent of water produced in many Indian cities does not earn any revenue

Water and its allied sectors like waste water and storm water drainage sectors work in silos.

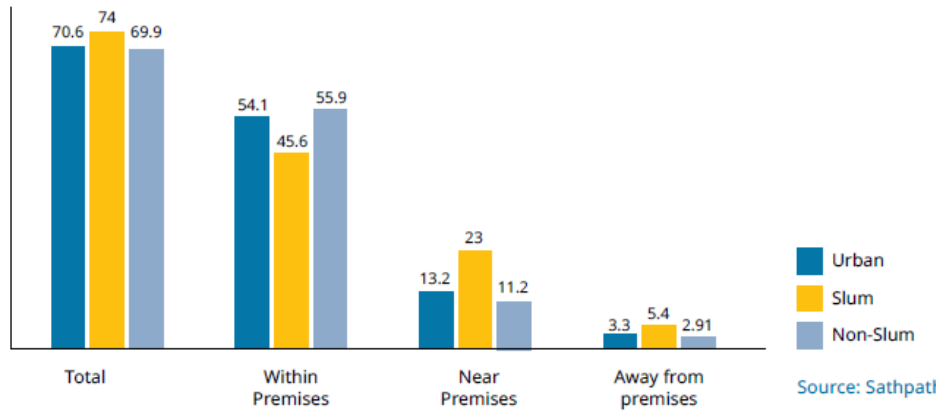
Insufficient infrastructure and lack of institutional reform I, impacting the efficiency of urban water sector

Distribution of main source of drinking water (urban)



Source: CPHEEO, 2011

Households using tap water (in per cent)



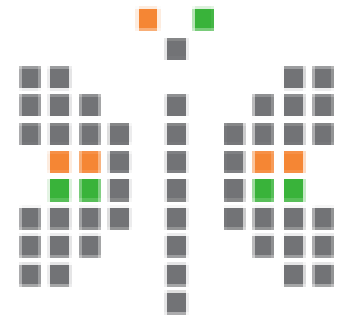
Source: Sathpathy, 2014



Key Programmes/initiatives



National Water Mission: Goal 4 - Improving Water Use Efficiency by 20% by ensuring improved efficiency both on the demand side as well as the supply side.



Smart City
MISSION TRANSFORM-NATION



एक कदम स्वच्छता की ओर



HRIDAY
Rejuvenating the Soul of Urban India

ICLEI South Asia's Projects on Integrated Water Management



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ICLEI - Local Governments for Sustainability

ICLEI – Local Governments for Sustainability is a network of more than 1,750 local and regional governments, supported by a team of global experts, driving sustainable urban development worldwide.



Who we are

ICLEI is the leading global network **cities, towns and regions**, committed to building a sustainable future, since 1990.



1750+ cities, town and regions

active in 124+ countries

impacting > 25% of global urban population

with 300 staff in 22 offices



LOW EMISSION DEVELOPMENT



NATURE-BASED DEVELOPMENT



EQUITABLE AND PEOPLE-CENTERED DEVELOPMENT



RESILIENT DEVELOPMENT



CIRCULAR DEVELOPMENT



Towards Sustainable Cities

COMMITMENTS

<p>SCALE UP AND EXPAND THE MODEL OF SUSTAINABLE CITIES AND REGIONS</p>	<p>MAKE SUSTAINABILITY A FUNDAMENTAL PART OF ALL LOCAL AND GLOBAL DEVELOPMENT</p>	<p>TACKLE THE MOST PRESSING ISSUES OF OUR TIME TO PROTECT THE LONG-TERM INTERESTS OF CITIZENS</p>	<p>UNDERTAKE A COLLECTIVE EFFORT FOR GLOBAL CHANGE ACROSS ALL SECTORS AND LEVELS OF GOVERNMENT</p>
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PATHWAYS

<p>LOW EMISSION DEVELOPMENT</p> 	<p>RESILIENT DEVELOPMENT</p> 
<p>CIRCULAR DEVELOPMENT</p> 	<p>EQUITABLE AND PEOPLE-CENTERED DEVELOPMENT</p> 
<p>NATURE-BASED DEVELOPMENT</p> 	

POLICY

<p>OUR POLICY APPROACHES TO DRIVE GLOBAL TRANSFORMATION</p>	<p>SUSTAINABLE GOVERNANCE & MANAGEMENT: SUSTAINABLE DEVELOPMENT IS A COLLECTIVE EFFORT</p>	<p>INNOVATION & SCIENCE: SUSTAINABLE DEVELOPMENT MUST WORK WITH AND FOR ALL</p>	<p>FINANCE: SUSTAINABLE DEVELOPMENT NEEDS INNOVATIVE MODELS OF FINANCE</p>
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What we do? How we promote urban sustainability

We connect leaders



We accelerate action



We provide
gateways to solutions





ICLEI'S Projects on Integrated Water Management

Regional Level

IAdapt

IDRC funded initiative at micro catchment level. The project is being implemented by ICLEI South Asia in partnership with IITM, IWMI and Athena Infonomics.

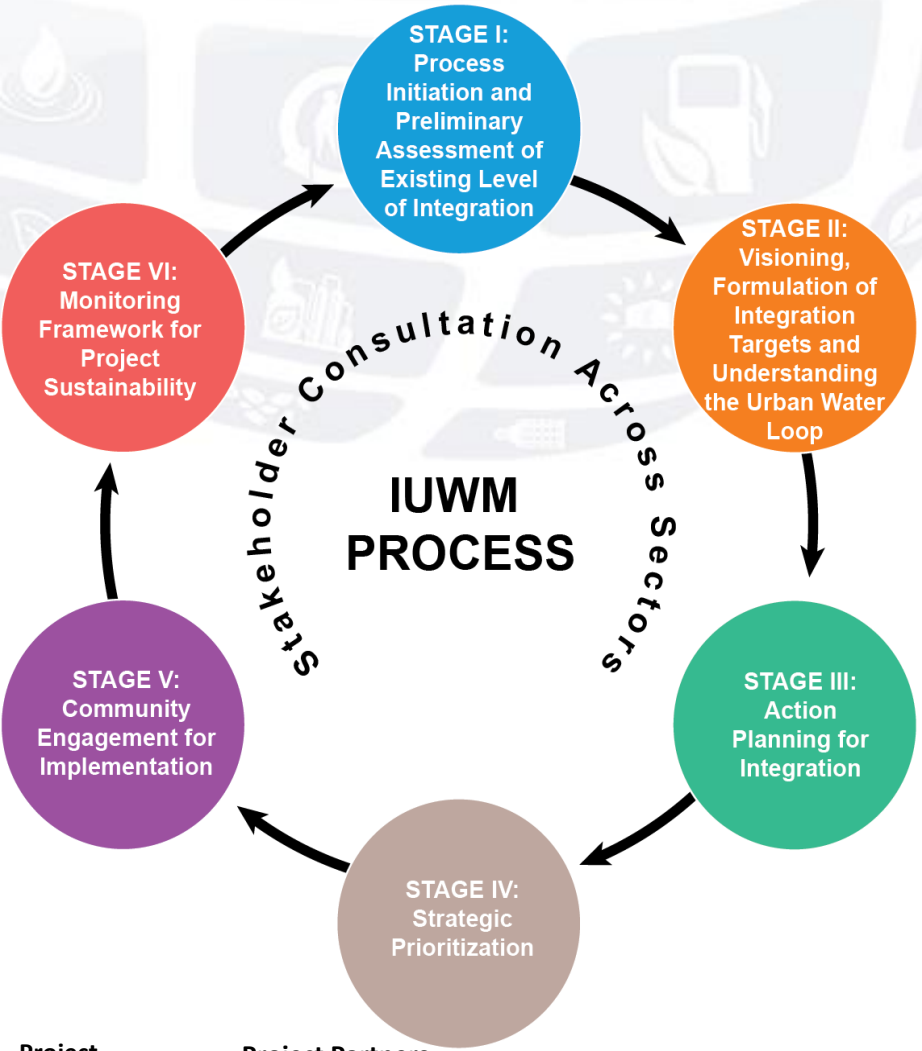
City Level

Adopt IUWM

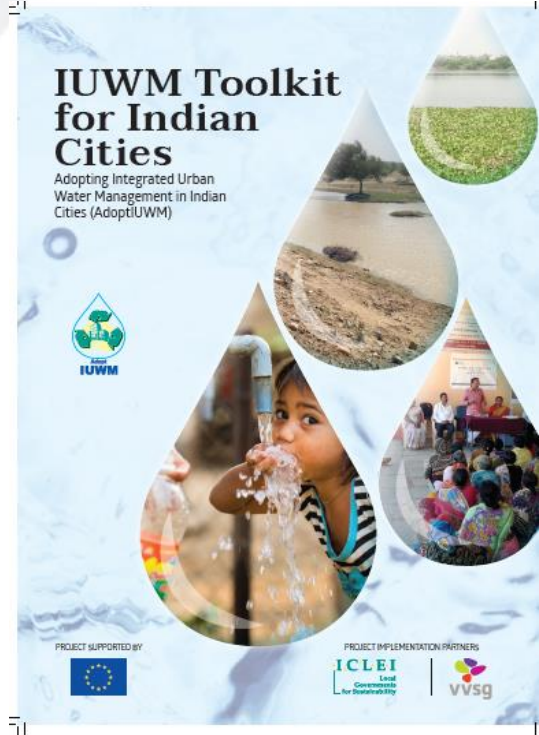
EU funded project implemented by ICLEI South Asia in collaboration with ICLEI European Secretariat and VVSG.



1. Adopting Integrated Urban Water Management for Indian Cities (AdoptIUWM)



Water resources planning & action plans



Capacity Building and Training



Pilot interventions



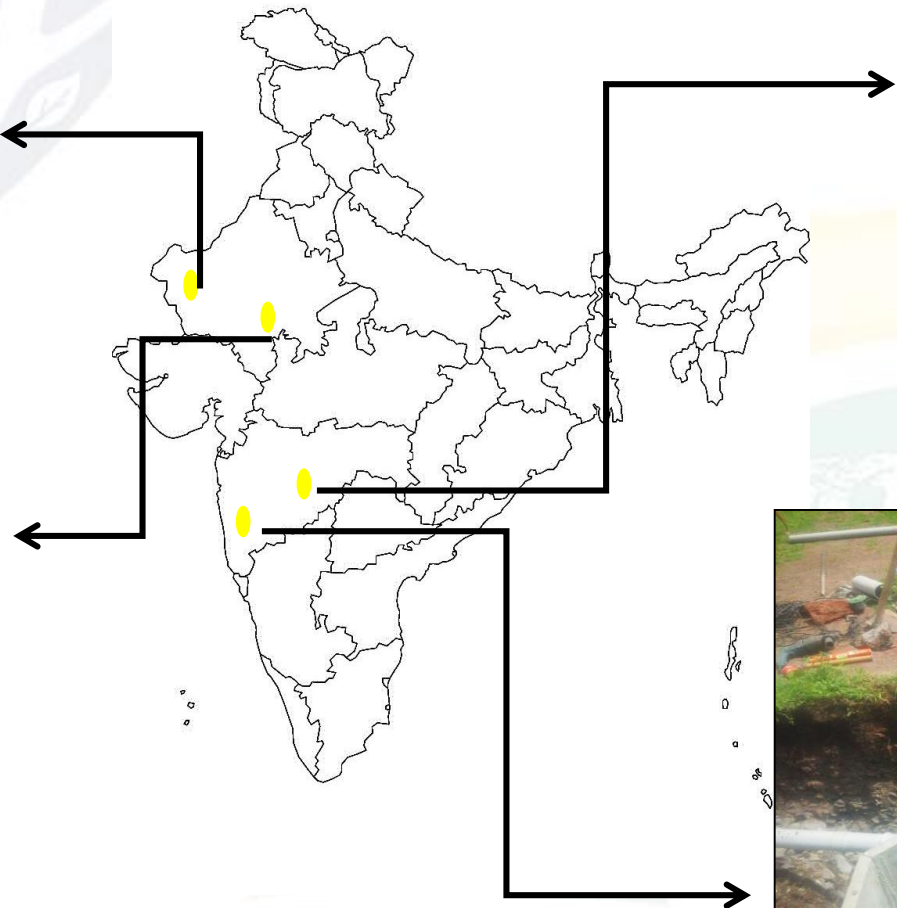


Integrated Urban Water Management for Indian Cities

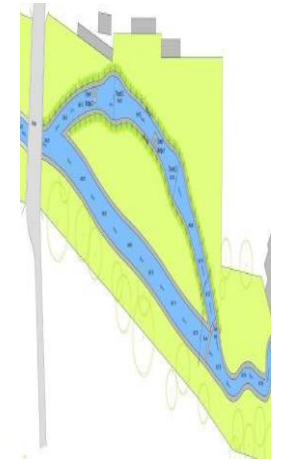
Jaisalmer: SWM & Revival of interlinked pond and traditional RWH structure



Pilot Interventions in India



Ichalkaranji: Reducing pollution load on water



Kishangarh: SWM & reduce pollution in the catchment areas of local water



Solapur: Ground water recharge



Integrated Urban Water Management for Indian Cities

Outcomes of pilot Interventions

More than 15,00 direct beneficiaries in 4 Indian cities



Connected more than 30 house holds with SBM



Benefited more than 5000 women and school girls in slum areas



Capacity building of more than 80 officials from 4 ULB on IUWM and waste management



Trained more than 35 city on IUWM Toolkit



A multi stakeholder platform



IEC and peer learning activities



Recognized at International Platform & by National Government



MHRD Research Bureau Puraskar 2017-18	
School Name	G.G.U.P.S. RAJAREDI
U-DISE	: 08210113408
Score	: 78/91
Percentage	: 85.71%
Rating	: ★★★★★
Remarks	: Very Good
Category	: Water
Score	: 19/22
Percentage	: 86.36%
Rating	: ★★★★★
Remarks	: Very Good
Category	: Toilet
Score	: 14/19
Percentage	: 73.68%
Rating	: ★★★★★
Remarks	: Good, but there is a scope for improvement



2. Integrated Rural Urban Water Management for Climate based Adaptations in Indian Cities (IAdapt)

To institutionalize climate change adaptation measures through the creation of an enabling ecosystem to adopt and implement IUWM approaches and IWRM approaches at catchment level guided by participatory catchment planning, simple decision support tools, preparation of catchment level action plans and multipronged financing approaches.



Funded by



Partners





3. Integrated Urban Water Management and implementation in Rajasthan cities (Kishangargh & Ajmer)

To build capacity of urban local bodies to mainstream integrated urban water management principal into municipal line function's existing activities and planning process.

- To secure local water bodies by restoration of catchment boundaries of local lakes/water bodies and reducing solid waste dumping.
- IUWM Action plan
- Implementation of the project in Kishangargh and Ajmer City



Funded by



Partners





Thank You!

Emani Kumar, ICLEI Deputy Secretary General
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Secretariat

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