

# *Smart Water Management & Policy Impact*

Professor Seungho Lee  
Graduate School of International Studies  
Korea University

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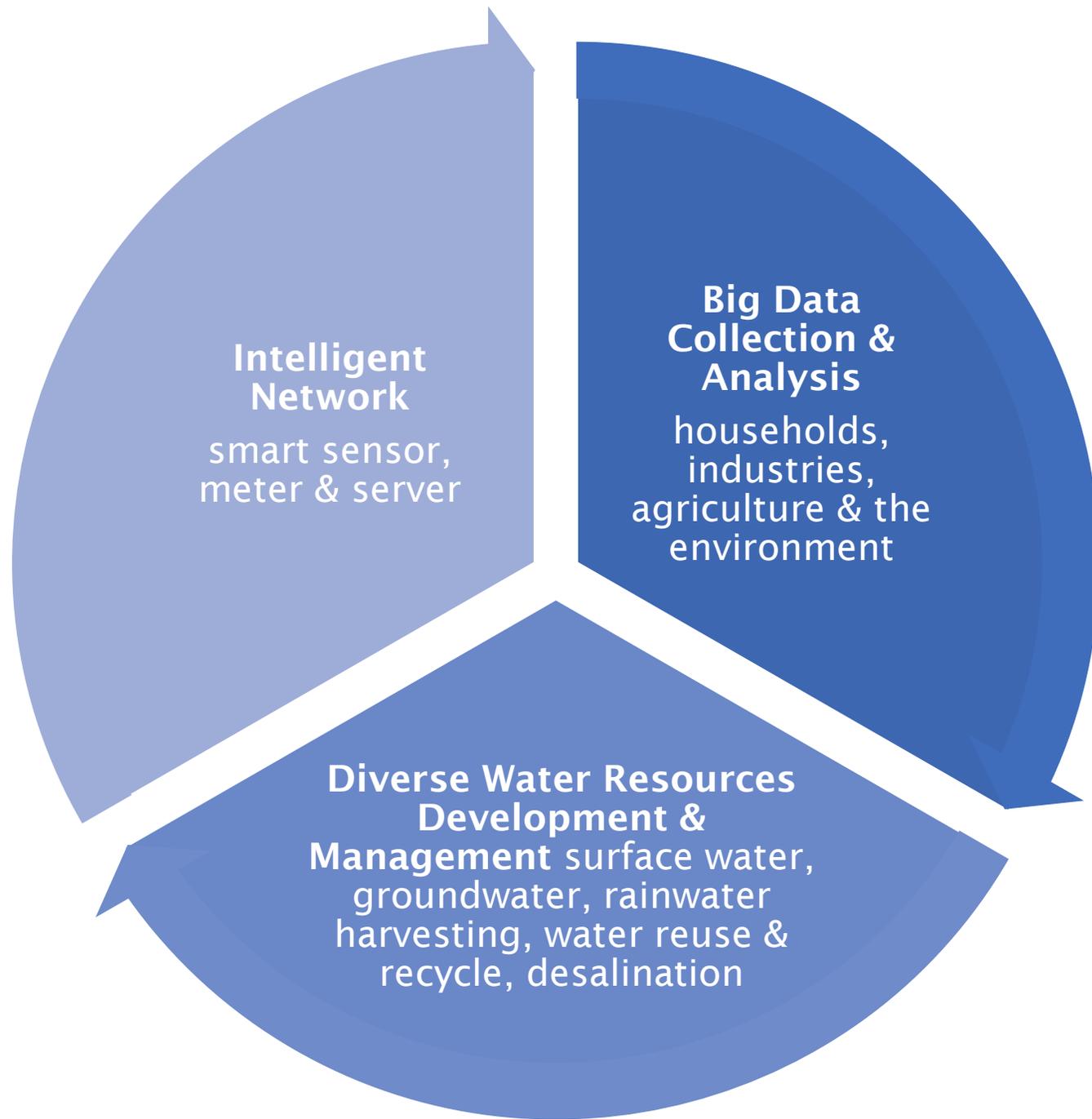
1. Background
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# 1. Background

- *Why Smart Water Management now?*
  - Water resources conservation
  - Alternative water sources, such as water reuse & recycle needed
  - Decentralized & locality-led water & wastewater treatment
  - Long-distance & energy-intensive water & wastewater delivery
  - Diminishing investment
  - Climate change & population growth
  - Water-energy-food-urbanization-climate change...nexus

## 2. Definition

- Down-to-earth definition
  - Advanced & cutting-edge water management system through the use of ICT, i.e. smart meter, smart sensor & digital maps for improving water resources, water supply & sanitation services
  - Management of river water, rainwater, groundwater, wastewater & desalinated water, water transfer, water reuse & recycle
- More thoughts
  - Securing sufficient amounts of water through diverse methods through Advanced Metering Infrastructure (AMI) (two-way automatic metering), sensor & server (ICT)
  - Considering agriculture, industries & ecosystems



Composition of  
***Smart Water  
Management***

# 3. Policy Impact

## *1) Improvement of service quality*

- Consumer as proactive stakeholders to monitor real-time information on water & sanitation services
- Saving water & immediate check of problems in water networks

## *2) Preparation against extreme climate change events*

- Advocating multiple & decentralized water & sanitation service facilities & networks
- Well prepared against extreme weather events, i.e. urban flashflood & long-spelled drought
- Saving energy against centralized water & sanitation systems

# 3. Policy Impact

## 3) *Low investment & high return*

- Little need to construct brand-new facilities & networks
- Self-reliance of local areas in water supply & sanitation services
- Short-distance & emergency water transfer possible

## 4) *Better water governance at the river basin level*

- Two-way information, good for service providers & consumers
- Consumers with better access to water data → able to monitor service quality provided by public/and private providers
- Data sharing means power transfer from service providers to consumers → *a prerequisite for strengthening stakeholder engagement in decision-making at the river basin level*

# *Smart Water Management & Policy Impact*



- Improvement of service quality
- Tackling climate change impacts
- Low investment & high return
- Better water governance