

# Public-Public Partnership in the Korean Water Sector – Implications for Indian State-level Water Agencies

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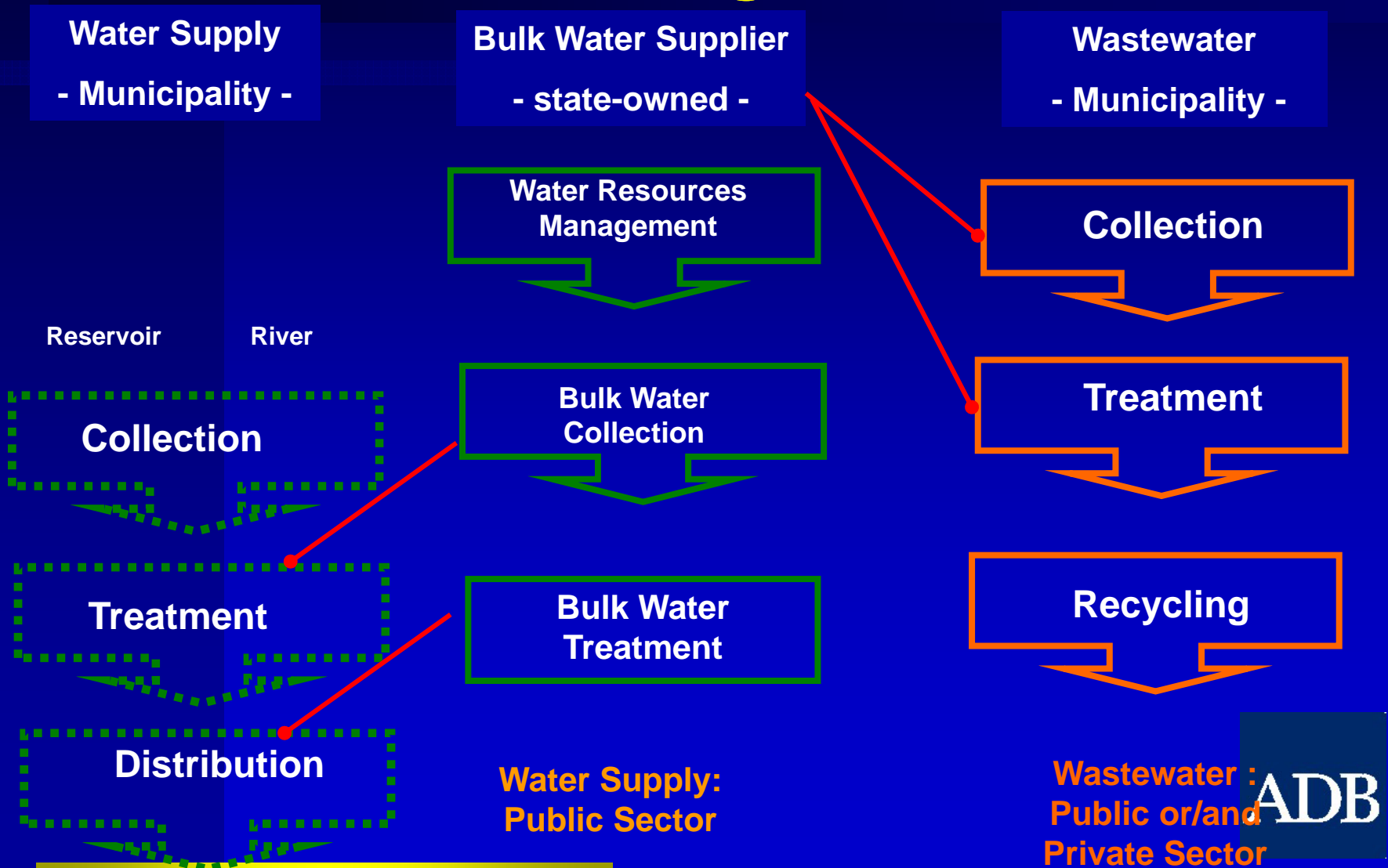
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# South Korea's (Urban) Water Sector Overview



- 91% of population is served by public piped water supply.
- Water services is a responsibility of municipal government; 164 municipalities have their own water bureaus for water services.
- Traditionally water was regarded as endowment, not an object of private ownership.
- Government's privatization plan faced massive opposition.
- Water services, in terms of coverage and water quality, is very good – 24/7 as a norm

# Water Services: Ownership and Management



# The Evolving Idea of Public-Public Partnerships ("PUPs") in Water Sector

- Water services industry has been deregulated since 2001 when Ministry of Environment announced private sector participation in water and wastewater services sector.
- *Water Services Act* allows public and private sector to participate in water sector, but most municipal governments and people are concerned with negative impacts to the private sector.
- K-water, a state-owned bulk water supplier, has assisted local governments with capacity building and technical consultancy for their water supply systems since the 1980s.
- With its financial and technical capabilities, and community support, K-water gained a reputation for its expertise and is seen as an alternative to private sector and as partner for water services delivery.
- The motivation differs between local governments. However, local governments want technical and managerial expertise rather than funding sources, so that water services are delivered at an affordable price and in a stable manner.

# K-water as a Public Partner

- Incorporated in 1967 as a state-owned water utility company.
- Responsible for water resource management and bulk water supply (treated, semi-treated, and piped raw water) to municipality.
- Financially and politically independent, statutory institution.
- Strong financial and technological background with an annual turnover of US\$2.2b and 3,000 engineers and technicians.
- Higher credit ratings than sovereign credit ratings on Korea (Moody's, Standard & Poor's).
- Presence in international water and hydropower PPP markets.



Water Resources



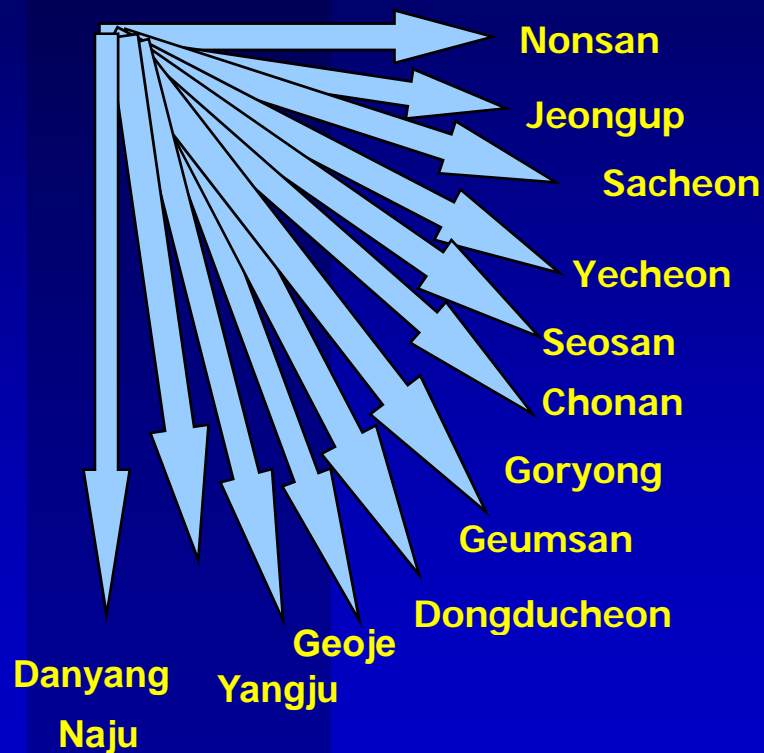
Bulk Water Supply & Pubs-based  
Water Delivery Services



Hydropower

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# K-water's partnership with Municipal Governments



- Mostly partnering with municipalities with financial and technical problems.
- Formed partnerships with 13 municipalities to date and plan to sign additional 50 municipalities by 2015.
- K-water's planned equity investment for 13 municipal water system: US\$600m.
- K-water is not profit-driven, and return on invested capital is only 3~3.26%.
- K-water also engaged in the operations of 11 wastewater treatment facilities on a PUPs basis.

# Nonsan PUBs: Partnership Elements

- A Partnership between Nonsan City and public water utility (K-water)

OBJECTIVE

TO REDUCE NRW by exploring new technologies and practices to improve distribution management and lower operating costs

- The first PUBs are formed in the water sector for a municipality in South Korea.
- Nonsan city was under financial pressure in water services and as indicated in the statistics one of the poorest water providers in terms of management and operations.
- K-water proposed a partnership with a particular focus on NRW reduction programs.
- Partnership was welcomed by mayor, local parliament and NGOs.
- The drivers of partnership are:
  - Growing budgetary constraints on funding
  - Lack of managerial and technical capability
  - Call for better water services and constituents
  - Acknowledgment of added value of the partner

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# Nonsan PUBs: Contractual Elements

- Based on a concession contract that reflected client needs, but accommodated target and performance elements

## SCOPE OF WORK

Mains replacement/rehabilitation  
Network modeling/GIS  
Leak detection/repair  
Operation of customer (call) center  
Water tariff billing

- 30 years of concession period (2004 onwards).
- US\$50m to invest in mains replacement/rehabilitation with a target ROE of 3% (100% equity investment).
- Water tariff is inflation protected.
- Water tariff collection is by municipality.
- Take over of existing employees.
- K-water paid management service fee per cubic meter supplied.

# Nonsan PUBs: Performance Elements

- Contained specific and measurable targets for required level of service

TARGETS:

TO REDUCE LEAKAGE and INCREASE CUSTOMER SERVICES to defined levels and increase operation efficiencies

	Before PUBS (2004)	After PUBS (2008)	
NRW	47%	30%	Target (2010): 20%
Customer Satisfaction Index	56	76	'World Research'
Water Tariff	854 Won/m <sup>3</sup>	826 Won/m <sup>3</sup>	
Investments	-	US\$ 22 million	Target: US\$50 million

# PUBs Development: Key Messages

- Like PPP, PUBs can also ensure efficiency in the provision of water services including decreasing the NRW, providing affordable and accessible water for all, ensuring water quality and accountability of the water authority to the public.
- The success of PUPs relies on their not-for-profit basis and retention of public operations, with the collaboration being stimulated by mutual trust and understanding and public sector ethos.
- PUBs aim at creating win-win situation at the public-public interface and should be dealt with in an economically sensible way.
- The community is an important partner in the PUBs relationship. The Nonsan PUBs would not be successful without support from them.