Group C • Anna Belot, Desiree Gabriel, Hailey Dash, Kai Vorland, Leo Jedynak,
Marianne Carre, Tao Jin, Tristan Leuty

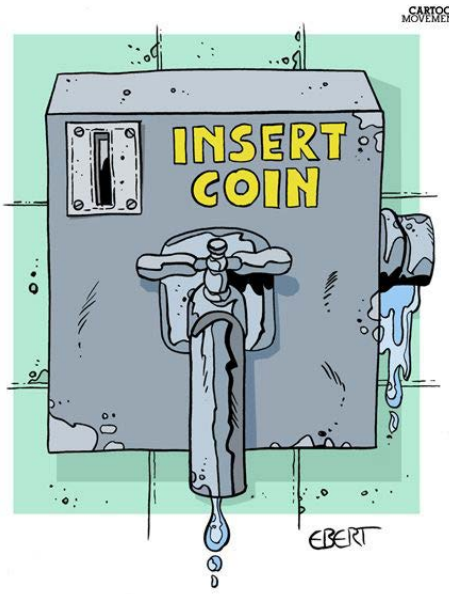
GEOG 412 - Dr. Karen Bakker

PANEL PRESENTATION HANDOUT

# WATER SERVICES PRIVATIZATION

February 5, 2020
Tao Jin

# INTRODUCTION TO WATER PRIVATIZATION




## What is privatization?

A market-based approach to water governance involving private, for-profit, corporations in the management of water and wastewater infrastructure.

## A brief review on water privatization:

1) first water and sanitation (W&S) service actually by private sector to wealthy groups who would like to pay for the water

2) taken over by governments for reasons including boosting national economy, ensuring public health and universal water supply

## Privatization for both political and economic reasons:

1) market-base approaches gain success to development

2) higher operational efficiency (in public W&S service of developing countries: costs not speding on water-related areas are over 40 percent, are overstaffted, earnings made can only cover 1/3 cost, and inability to provide water service )

3) financial investment (in US, 375B-650B investment gap from 2005-2019 in infrastructure rehabilitation, upgradation and expansion; in the UK: investment to meet the EU water quality standard; in developing countries, 1.2B and 2.4B people need improved water and sanitation services respectively; manage population and urbanization: with the depletion of nearby water resource, the costs of new source development and water conveyance increase).

## Commodity or commons?

- **Commodity**: economic good that is tradable in markets by individual owners, incorporating private companies. Under this perspective a price system is expected to suppress the water-wasteful behaviors.

- **Commons**: public good that is not tradable and considered owned by a collective of citizens, incorporating conflict interests, collective management by communities and government. This view assert to use ethics to refrain people from wasting water.

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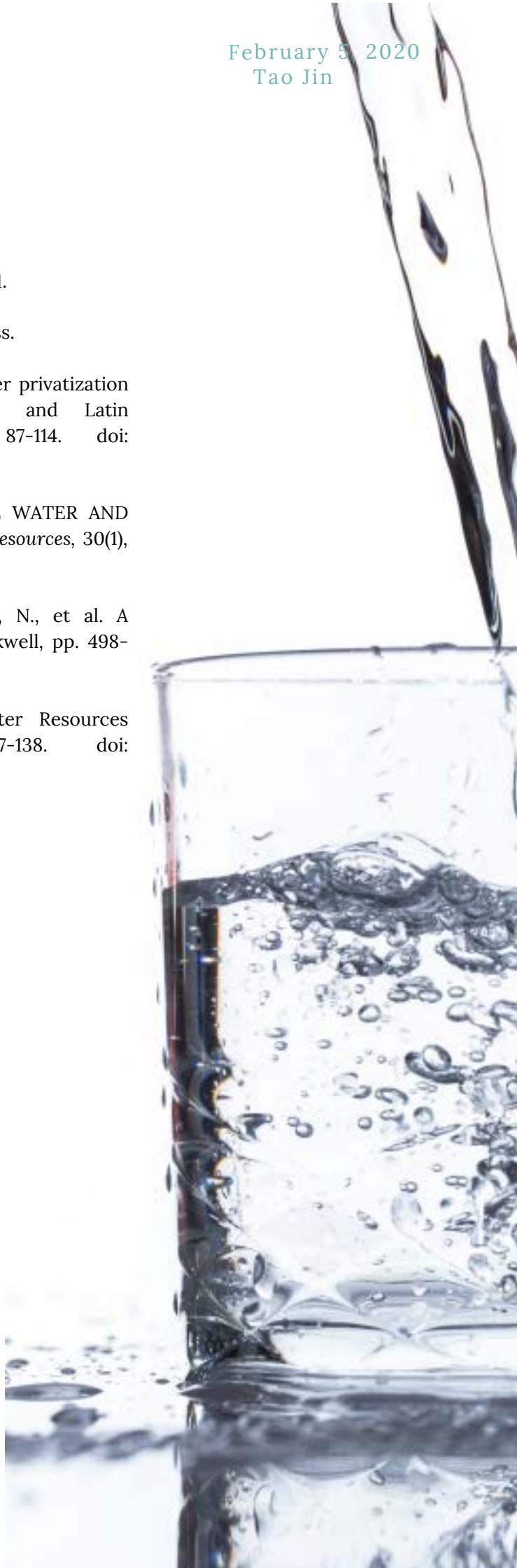

February 5, 2020
Tristan Leuty

# TYPES OF PRIVATISATION

Broadly speaking water governance regimes fall into one of 3 categories: the public sector, the private sector and more recently as a counterbalance to the neoliberal agenda; community driven. Each of which is a vaguer term that highlights a more continuous set of policy implications in water governance practice.

## MANAGEMENT REGIMES

- **Public Sector**: governance is completely undertook by the state. Water infrastructure as well as distribution and fee collection all fall under government mandate and operation.
- **Services Contract**: This model consists of short term contracts between the government and a private contractor to complete a specific task within the wider water management framework.
- **Management Contract:** the government transfers portions of the maintenance and oversight responsibilities of the water management framework to a private company while still maintaining others including investment and expansion.
  - **Lease/Affermage:** Management contracts that include the transfer of all maintenance and operating functions, leases the private firm pays a lease fee and keeps revenue, affermage's the private firm is payed per unit produced.
- **Concession Model:** everything except for permanent ownership of the infrastructure is transferred to a private firm. Private firms are expected to expand water management infrastructure as they see fit for the duration of the contract.
- **Build-Own-Transfer Model:** A private firm is expected to build, upkeep and maintain water management resources for the duration of a contract at which point ownership can transfer back to the state.
- **Divestiture:** The government sell all of its shares in an existing water management system to the private sector and allows industry complete autonomy.
- **Cooperatives:** Are structured like private companies except domestic customers make up the stakeholders who in turn get to elect a adminstrative board to oversee water governance for the group, usually found in smaller scale settings

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# LEGAL FRAMEWORK

The General Comment No.15, published by the UN committee in 2002 states that “the human right to water is indispensable for leading a life in human dignity. It is a prerequisite for the realization of other human rights,” and also affirms that “the human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses.”

Section 25 of the UDHR stating the right to a standard of living adequate for the health and well-being of himself and of his family, as well as section 11 being the right to an adequate standard of living and 12, the right to health. These sections all can be argued to be implied as rights to water and sanitation

---Riparian Water rights is a system for administering water for those who have land along its pathway. This system allows landowners whose estates collaborate with a body of water have a right to make use of the flowing water in a reasonable way. It is heavily dependent on “reasonable” use because it is a case of the tragedy of the commons.
---The Prior-appropriation water right legal doctrine allocates the first person to use a quantity of water for agriculture, industrial or household uses has the legal right to use that amount of water for that specific purpose.

“The question of whether to privatize is more than merely technical; it is properly a political debate about our worldviews of water, and of society.” (Bakker 2003)

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February 5, 2020
Desiree Gabriel

# POLITICAL DRIVERS

The governance of water is pertinent to numerous sectors, including human health and development, the environment, agriculture, industry, etc., while also impacting the economy. Additionally, the global urban population reached 50% in 2007 and is growing, meaning that agglomerated populations are requiring a higher number of *efficient and inclusive* water supply and sanitation (WSS) systems. This potentially impacts adjacent rural communities.

### THE ROLE OF THE WORLD BANK GROUP

Agenda of the structural adjustment programs included privatizing WSS. Loans were provided on the terms that nations reform their WSS and adopt neoliberal ideals.

*Dublin Principles* (1992) adopted by WB with principle no 4: "water has an economic value in all its competing uses and should be recognised as an economic good." Propagated to those who needed loans.

### REGIONALIZATION/CONSOLIDATION

**Regionalization**: consolidation of facilities or activities among nearby systems (usually uplifting a dominant locality)

**Consolidation**: mutually agreed take-over of one system by another

### DECISION MAKING PROCESS:

- **Rationale of privatization**: reduce fiscal stress, direct more resources towards WSS infrastructure and management (increase efficiency and reach/decrease water losses)
- Governing bodies that choose to privatize are held responsible by constituents; multifaceted issues, thus decisions must be made diligently.
- Are consumers a community member? Citizen? *Customer*? Water is local in character, thus public ownership tends to be an idea tied to local communities.

# CASE STUDY: COCHABAMBA, BOLIVIA

Cochabamba is an example of what could happen when the consolidation of a WSS management is not comprehensive.


**Under public WSS** (prior to 1999): SEMAPA
- Efficiency was the reality: ⅔ coverage, 50% water loss within the system
- Majority of the population relied on alternative water sources such as wells and rainwaters
- Bolivia to privatize due to WB loan requirements.

**Privatization through Concession**: Aguas del Tunari (subsidiary of US operated Bechtel)
- An average of 60% rate increase for existing frameworks.
- Additionally, licenses to use wells and rainwater catchment systems needed to be bought.
- Services did not improve (coverage and water loss remained relatively the same)

Caused uprisings from December 1999-April 2000 and expulsion of Aguas del Tunari. Currently Cochabamba's WSS is still insufficient in addressing the needs of the population, but the community has agency over their WSS through participating in politics.

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February 5, 2020
Marianne Carre

# THE ECONOMIC RATIONALE

## THE DEBATE OVER PRIVATIZATION OF WATER SUPPLY AND SANITATION INDUSTRY:

**More than an economic debate**, the supply privatization is however driven by the debate about the relative efficiency of modes of ownership.

Opponents of privatization argue that water supply is characterized by "market failure' : water is "an uncooperative commodity (*Bakker*, 2018) that prevents markets from functioning efficiently.

- "Natural monopoly"
- Externalities : water as a "public good"

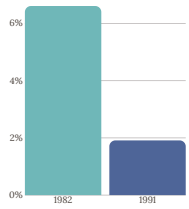
Proponents of privatization argue that despite this market failure, competition and private sector ownership creates incentives for **increased performance and accountability**. Subsequent efficiency is expected to enhance capital investment and reduce tariffs.

## MEASURING PRODUCTIVITY AND EFFICIENCY

Luenberger productivity & Malmquist productivity indices
Concept of "Absolute efficiency advantage"

## THE CASE OF BRITAIN AND WALES

1989 - Relatively late privatization of water industry: "apogee" of Margaret Thatcher's government's privatization programme.
State assets were sold off to ten new water service companies.




*Share of public production of goods and services in GDP*

Privatized water utilities were subject to environmental and financial regulations. **Three regulatory agencies** were established : the Office of Water Services (OFWAT) to regulate prices, the Drinking Water Inspectorate (DWI) to inspect water quality and the Environmental Agency, (EA) to protect the environment.
Additionally, a regulatory framework was designed to incentivize efficiency gains: **RPI + K**. Price increase for a company is a function of the cost performance of its competitors, thus providing incentives to innovate and reduce costs.

## MIXED EMPIRICAL ON THE ECONOMIC IMPACTS OF PRIVATIZATION

> *"If the water companies' role is to keep as many people as possible employed, privatization in England and Wales has failed. If, on the contrary, their role is to bring capital to a system long starved of cash, to upgrade and repair crumbling infrastructure, to clean up rivers and beaches, and to provide better water and better service to their customers, privatization looks much more like a success."* (Brubaker, 2001, p.35)

- Job losses

**21.5%**

Employment decrease (1990-1999)
*Dore et al. (2004).*

However, better training, higher wages and improved working conditions for remaining employees.

- Investment

**£3.7 B.**

In investment by 1998-1999 (compared to £2 billion in the 1960s, 1970s, 1980s) (*Brubaker*, 2001)

However, EU water quality and state regulations were the main reason for the significant increase in capital spending

- Unit price

**46%.**

Increase in average water bill from 1989 to 1998–1999.
*Lobina, 2001 as cited in Dore et al. (2004).*

**Increase in profitability** compared to Sweden, Spain, Hungary, France.

Subsequent price tightening by the regulation authorities.

- Competition

Limited success of competition
Recent trends towards **mutualisation** (2000, assets of Yorkshire Water sold to consumers community)

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# THE ENVIRONMENT

When 1.2 billion people around the world lack access to clean drinking water, it can be difficult to consider environmental concerns. Therefore, the environment is often neglected in both public and private water services management scenarios.

## FRAMING SCARCITY

Transitioning from the Structuralist Hydraulic Paradigm to the New Water Culture Paradigm

### STRUCTURALISM

The structuralist hydraulic paradigm perceives as a commodity resource. It's removed from its environmental context.

### WATER CULTURE

Water sources provide drinking water but they also provide ecosystem services, leisure activities, transportation, and affect upstream and downstream actors.

## ENSURING QUALITY

Tools to measure sustainability are shifting from withdrawal-to-availability ratio toward more holistic systems of measure

### WITHDRAWAL - TO - AVAILABILITY RATIO

Ecological sustainability is often measured using this ratio. Measuring environmental impact in this fashion does not consider the externalities involved in producing clean drinking water.

### IWRM

Integrated Water Resource Management system is a set of guidelines produced by the U.S. government that considers a wider range of environmental impacts including source quality, biodiversity, and the usability of the source for other purposes.

## INNOVATION

In the case of Dakar in Senegal, the city struggled with the cleanliness of the river running through the city due to a lack of sewer infrastructure. The city couldn't provide enough clean drinking water and the river was heavily polluted. Partnering with the Bill & Melinda Gates foundation, they developed a processor that turned human waste into energy and clean drinking water. This project shows there is promise for public-private partnerships in the technology space.

## ENGLAND AND WALES

England and Wales have achieved the most successful form of privatization in regards to environmental care. Their success rests less in the implications of privatization in itself, and more in strict regulations that managed the private corporations' environmental impact. This success can be viewed as a philosophical transition from the regionalist hydraulic paradigm to the new water culture paradigm which views water as a social and environmental resource.

**Table 1.** Water Quality, Selected Indicators (1990–2004)

| | 1990–1991 | Latest figures (2002–2003) |
|---|---|---|
| River and canal chemical quality – good or fair | 84% | 95% |
| River and canal biological quality – good or fair | 84% | 94% |
| Coastal bathing water – compliance | 66% | 99% |
| Sewage treatment works – compliance | 90% | 99% |
| Sewerage overflows – unsatisfactory | 31% | 17% |

(Bakker, 2010)

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Hailey Dash

# SOCIAL CONSIDERATIONS

## BENEFITS OF PRIVATE SECTOR PARTICIPATION

Private sector participation in water services can have major benefits to vulnerable social groups who are often impoverished as well as largely dependent on water services.

1. Financing projects when public sector does not have the economic capacity to do so.
2. Providing innovative technology that the public sector does not have access to.
3. Using efficient construction practices and business models for planning processes.
4. Avoiding bureaucratic delays that the public sector is prone to.

## SOCIAL GROUPS VULNERABLE TO PRIVATIZATION

**Women**: More likely to live in poverty as well as their common role in budgeting water and sustaining family health positions them precariously. This is exacerbated by membership to other social groups (i.e. race, class).
**Indigenous Peoples**: Water is utilized byIndigenous groups, especially women who are often seen as “keepers of water” in many cultures, for purposes of sustenance, spirituality, & traditional knowledge acquisition.
**Rural Populations**: When ostracized, their geographic location makes water often inaccessible.
**Urban Populations**: When living in the periphery of cities, accessibility to water systems poses difficulty.
**Global South**: Communities here primarily burdened with water crisis relative to Global North elites.

## HARMS OF PRIVATE SECTOR PARTICIPATION

Although, many benefits to private sector participation in water management exist, vulnerable communities can be negatively affected as well.

1. Private sector interests are consistently prioritized over the vulnerable communities that they work with in order to maximize profits. Cost-cutting gives low-lack quality results in project outcomes.
2. The use of Inclining Block Tariffs to set pricing is detrimental to low-income communities as it charges based on water usage. Many of these communities are heavily reliant on water.
3. The lack of connection of private water systems to ostracized rural and urban communities and consequent connection charges exacerbates financial strain.
4. Imperialist nature of MNC's in the Global North accumulating wealth at the expense of Southern communities.

# INDIGENOUS COMMUNITIES IN CANADA

**Federal funding for water infrastructure has been inadequate to address urgent drinking water and wastewater treatment needs of Indigenous peoples. The Assembly of First Nations has come to favour a combination of local self-control and management, however, privatization is being heavily promoted by the Trudeau administration. Although private financing of water supply projects would alleviate water advisories in Indigenous communities, the prospective harms indicate that private firms may be threatening health and local environments, community employment, and local control as a result of failing to invest in water protection and lack of adherence to safety guidelines.**

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February 5, 2020
Kai Vorland

# LOOKING TO THE FUTURE

The topic of water is arguably the most critical environmental issue in existence today; it relates to every facet of our planet, and our species is reliant on it for survival. Our dependence on water makes it one of the most pressing situations and therefore, also one of the most controversial. To better manage our water resources, privatization was introduced. In the 1990s there was a surge of privatizations; multiple regions signed contracts that would ideally supply safe, clean water to communities at a lower cost. **Privatization was good in theory but inconsistent in its delivery; very few instances were successful, and the majority did not achieve what was intended.**

Privatization promoted an increase in efficiency paired with stricter environmental and testing regulations to result in improved infrastructure, and clean, safe water at a lower cost. What most regions received, however, were major companies having complete control over one of life's necessities. Ultimately, privatization undermined the human right to water. Public services were seemingly the only other option. **What privatization couldn't do, the public could, but that also worked in reverse.** General water management had control over their water system, yet they often did not have the funds to make the large-scale changes necessary to be effectively successful. Public-Private Partnerships (PPPs) were introduced as a way to mitigate both options, yet they are also hotly contested due to their disjointed nature. So what now?

Over the past two decades, the trend of "remunicipalizaton" has grown. **Remunicipalization is the process by which a city, region or national government terminates or refuses to renew water concessions, leases, or management contracts with private companies to bring back water under public control.** Between 2000 and 2015, there were 235 cases of water remunicipalization, and as a result of that, 100 million people across 37 countries benefit from water as a public commodity. Privatization dominated as the popular "solution" for decades, but with its scale of failure, the idea that privatization is "better" is being dismantled. Accra (Ghana), Berlin, Buenos Aires and Paris are a few examples of cities that have remunicipalized. Furthermore, evidence has shown that remunicipalization has been linked to signifiant improvements in the quality of water provision.

Despite the failures of privatization, it is still in existence; there are even cities such as Nagpur in India and Jeddah in Saudi Arabia that have recently signed privatization contracts. **There is no blanket solution to water management; what works for one city is not necessarily the solution for another.** We can look at the past and use that as a guide for the future, but ultimately we must look at the current economics, politics, culture and impacts affecting a region in order to arrive at the most informed and beneficial solution possible.

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