

A silhouette of a water tower with a circular observation deck on top, set against a dramatic sunset sky with orange, pink, and blue hues. The tower is the central focus, with its structure and observation deck clearly visible against the bright background.

# 6th Annual Seminar UNESCO Chair in Sustainable Water Services

“Ways for promoting Resiliency and Rehabilitation of Aging Infrastructure”

## Part I: Views on Resiliency in Water Services

### Presentation

**Decision-making and resiliency: challenges and opportunities facing the right to essential water services**

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- Why “resiliency”? What “resiliency”?
- Missing connections? “Resiliency”, inequality, citizenship, right to water, and democratization of water service policies
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# Elements for the debate

- **Theoretical primacy given to**
  - **X-disciplinarity:** rupture with disciplinary **reductionisms** and **determinisms** (e.g. technocentric, economicistic, or sociocentric explanations)
  - **processual analysis** (long-term socio-ecological processes): rupture with short-term **reductionisms** and **determinisms** (pragmatism; the “retreat to the present”, etc.)
  
- **Water services “resiliency” as embedded in and interrelated with (often determined by) other fundamental processes**
  - **Processes that produce and reproduce quantitative and qualitative, structural inequalities** (e.g. leading to vulnerability, defencelessness, etc.)
  - **Commodification processes** (e.g. of common and public goods)
  - **Democratization processes** (e.g. of policy making and implementation in essential water services)

# On scientific knowledge and epistemological obstacles

Before all else, we have to be **able to pose problems**. And in scientific life, whatever people may say, problems do not pose themselves. It is indeed having this sense of the problem that marks out the true scientific mind. For a scientific mind, **all knowledge is an answer to a question**. If there has been no question, there can be no scientific knowledge. Nothing is self-evident. Nothing is given. Everything is constructed.

Gaston Bachelard,  
The Formation of the Scientific Mind, [1938] 2002, p. 25

# Scientific problems

- **What** problems do we pose?
- **Whose problems** are these? Or, **whose interests** are these problems addressed to?
- For example, how to achieve the “resiliency” of water services infrastructure (or of any other infrastructure, for that matter) **is a problem for whom?** Or, **whose problems** will be addressed by securing the “resiliency” of water services infrastructure?
- Actually, why “resiliency”?

# Why “resiliency”? What “resiliency”

**“Hard resilience” = “the direct strength of structures or institutions when placed under pressure”**

**or**

**“Soft resilience” = “the ability of systems to absorb and recover from the impact of disruptive events without fundamental changes in function or structure”? (Proag, 2014)**

# Why “resiliency”? What “resiliency”

Another example:

“specified resilience arises in response to the question “**resilience of what, to what?**”” (Folke et al., 2010)

We could also add, perhaps:

Resilience to what **by whom? For whom?** An entire society? The entire population of a city? Certain social groups?

Is “resiliency” **an end in itself? Or a mean to achieve certain ends?**

Example (?): the “resilience” of a water utility to a changing policy environment [e.g. “favelas” deemed to be “unserviceable” by public utilities responding to policy constraints]

# Why “resiliency”? What “resiliency”



Example: the case of Recife, Brazil  
See EU Project DESAFIO:  
[www.desafioglobal.org](http://www.desafioglobal.org)

# Why “resiliency”? What “resiliency”

The problem is not necessarily the concept itself, but

- What are **the connections** that we establish between “resiliency” and other processes?
  - e.g. the connection between “resiliency” and “vulnerability”, “risk”, etc.
- What is the place that we give “resiliency” in our **conceptual hierarchy** (theoretical primacy)

It is in the act of cognition that we shall show **causes of stagnation and even of regression**; there too we shall discern **causes of inertia** that we shall call **epistemological obstacles**. Knowledge of reality is a light that **always casts a shadow** in some nook or cranny. [...]

As Bergson has so rightly said, 'our minds have the irresistible tendency **to regard the idea most often of use to them as being the clearest**'. Ideas will thus acquire **far too much intrinsic clarity**. And with use, ideas take on **unwarranted value**. A value in itself impedes the circulation of values. It is a factor of inertia for the mind. On occasion, **a dominant idea will polarise the mind in its totality**. [...]

There comes a time when the mind's preference is for what confirms its knowledge rather than what contradicts it, for **answers rather than questions**. The conservative instinct then dominates and intellectual growth stops.

Gaston Bachelard,  
The Formation of the Scientific Mind, [1938] 2002, pp. 24-25.

# Missing connections?

- What are the connections between “resiliency” and “**structural social inequality**”?
- What are the connections between “resiliency” and **rights** (citizenship rights, human rights, the right to water, etc.)
- Are these connections **relevant** for water services infrastructure? Why?
- Have we got the **conceptual hierarchy** right?

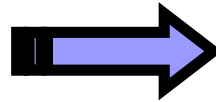
# On rights and the right to water services

Links between citizenship and water

## Citizenship rights

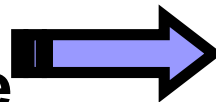
## Water specific links

**Civil rights (property rights, justice)**



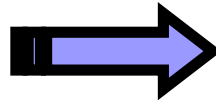
**Water rights, water equality and justice**

**Political rights (democratic exercise of power)**



**Democratic water governance, participation**

**Social rights (civilized standards of well-being)**



**Universal access to water and essential sanitation services**

# On rights and the right to water services ...

## Extended conception of citizenship, specifying:

- Right to information and informed consent:
  - E.g.: right to information about **how water resources and services** are
    - **managed** (for instance, compliance with concession contracts; environmental standards; service quality; affordability; and so on)
    - and **governed** (how they are governed, by whom, and for whom; transparency of information allowing democratic accountability and control)
- Intra and trans-specific/temporal rights and duties (e.g. intra- and inter-generational justice; environmental protection)
- Rights vs. duties

## On water services and democratic governance

- The interrelationship between governance of the social system and water governance can adopt very **different forms**:
  - Sound and efficient water governance can be achieved in the context of **highly authoritarian and undemocratic political systems**
  - And **highly democratic and participative models do not guarantee effective water governance**
- The policy consensus around “good governance” practices such as promoting **citizen participation** is not the result of an empirically proven model
- It is derived from a complex array of factors including **normative preferences** and **social struggles** for the democratization of decision-making processes

# Water as a “right”

- The notion of water for **essential human uses** as a universal endowment can be traced in different cultures
- Water was considered to be a **common or public good** long before the development of modern Western patterns of social organization
- Ancient Middle Eastern societies introduced rules to ensure fairness in the allocation of water sources and protecting the vulnerable sectors of the population from water profiteers. These rules included
  - the banning of water vending in case of essential community uses
  - the Right of Thirst to safeguard the access to drinking water for humans and animals,
  - and the principle that one cannot deny access to water for essential human use to anyone

(Caponera, 1954; Civic, 1998; Hirsch, 1959)

# Water as a “right” ...

- The 1977 UN Water Conference declared that everyone has “the right to have access to drinking water in quantities and of a quality equal to their basic needs” (UN, 1977)
- In 2002 the UN Committee for ESC rights declared that access to water is a **human right**
- Finally, in 2010 this principle was sanctioned for the first time - and after long and embittered debates- by the United Nations General Assembly, which declared that  
  
“[s]afe and clean **drinking water and sanitation** is a human right essential to the full enjoyment of life and all other human rights” (UN, 2010).

# Water as a “right” ...

- It is worth mentioning that 122 countries voted in favour on the 2010 UN resolution, and there were no votes against.
- **BUT 41 countries abstained** from the vote, most of which had openly opposed the proposal to declare water a human right during many years of debate. Other **29 failed to show up for the vote**. In the end, **34.5% of the countries did not support the vote** to declare access to water a human right.
  - Canada complained that the resolution “appeared to determine that there was indeed a right without setting out its scope.”
  - The UK said “there was no sufficient legal basis for declaring or recognizing water or sanitation as freestanding human rights, nor was there evidence that they existed in customary law.”
  - The U.S. said “there was no ‘right to water and sanitation’ in an international legal sense, as described by the resolution.”
  - Australia “had reservations about declaring new human rights in a General Assembly resolution.”
  - Other notorious abstainers: Austria, Denmark, Israel, Japan, Netherlands, Sweden ...

# Water as a “right” ...

- Contradictions between the formal enunciation of the right to water as a universal entitlement, and the real practices that render this formal principle meaningless for vast majorities
- Water as a **common good**, as a **gift**, as a **public good**, as a (human, citizen, etc.) **right**, or as a **commodity**
- Worrying examples:

**“Time To Jump On The Next Commodity Boom: Invest in Water”**

<http://www.nuwireinvestor.com/articles/time-to-jump-on-the-next-commodity-boom-invest-in-56921.aspx>

**Investors Are Mining for Water, the Next Hot Commodity**

<https://www.nytimes.com/2015/09/25/business/energy-environment/private-water-projects-lure-investors-preferably-patient-ones.html>

# If the IMF said it at Davos 2018...

**Christine Lagarde to Davos leaders: I warned about the dangers of inequality in 2013 and nobody listened**



**“I don’t know why people didn’t listen,” Lagarde told Davos participants**

<https://www.weforum.org/agenda/2017/01/christine-lagarde-to-davos-leaders-i-warned-about-the-dangers-of-inequality-in-2013-and-nobody-listened/>

# Water services infrastructure and structural inequality

## Worrying lessons from empirical research

- **“Resilience” is not incompatible with “structural social inequality”**
- **“Resilience” is not incompatible with the negation of rights**
- **Achieving water services “resiliency” can contribute to structural social inequality and rights violations**

# Lessons from the MDGs

The MDG reports alerted that the advances made towards meeting the goals in 2015 often **reproduced or even generated new inequalities** in the access to water services:

“[I]t is usually the poor and otherwise excluded and marginalized populations who **tend to have least access** to improved drinking water supplies and sanitation. Interventions that do not have an equity focus **may exacerbate inequality** by failing to reach the most disadvantaged subgroups. [...] there are multiple dimensions of inequality, which can overlap, combine or reinforce one another. Without specific attention to marginalized or vulnerable groups, it is possible to see national averages improve while **within-country inequality increases**” (WHO-UNICEF, 2014: 38).

# Lessons from the MDGs

The same report showed that in some countries that met the MDGs intra-national inequalities increased because the wealthier tend to benefit first:

“[... There are] **stark disparities** across regions, between urban and rural areas, and between the rich and the poor and marginalized. The vast majority of those without sanitation are poorer people living in rural areas. Yet, **progress on sanitation has often increased inequality by primarily benefitting wealthier people**” (WHO-UNICEF, 2014: 6).

# Lessons from the MDGs

The MDG reports claimed that nominally the objective for water (reducing by half the proportion of the world population without access to “improved” water sources) would have been achieved

But 45 countries, **23.4 per cent** out of the total 192 listed in the reports, did not achieve it.

As we know, the situation is graver in relation to **sanitation**, as only 95 countries, **49.4 per cent**, achieved the goal.



**What will happen to the ODS?**

**Can we achieve them by 2030?**

**In addition to a complex understanding of “infrastructure resiliency”, what other significant processes must be taken into account?**

# Challenges ahead

- The prevailing patterns at the international level in public policies related to water services **are far from complying with the criteria of substantive democracy**, the right to wellbeing, including the right to water, especially in relation to protecting **vulnerable communities**
- Inclusive vs excluding public policies in water services
- Lack of consensus about the **crucial role of the State** to guarantee the exercise of rights, including the right to universal, affordable and safe water services
- Formal vs substantive democratization

# Challenges ...

- Prevailing public policies in water services continue to **alienate and exclude common citizens and users** rather than promote democratic practices.
- The evidence shows that too often “citizen participation” in policy programmes means **“willingness” to accept** decisions already taken by power holders and technical experts with little or no consultation.
- Users are often **reduced** to the roles of passive beneficiaries, providers of labour and resources, or mere clients of profit-oriented water services.

# Challenges

- **Substantive decisions** about how water services should be financed and organized (e.g. should these be provided as a public good and a social right or should rather be considered to be commodities to be delivered commercially by profit-oriented private or public operators?) are **imposed on the population**, often with disregard for the fact that large citizen majorities oppose the initiatives, which has triggered **endless conflicts** in many countries.
- These prevailing policies have created an **imbalance** resulting in the **weakening of local governments and civil society**. In many cases the authorities have lost the capacities they had acquired in the past to **exercise democratic control and regulation** over the management of essential public services.

# Challenges

- The fact that **responsibility** for water services and related activities such as management of water resources or environmental and public health is often **fragmented across different sectors and levels** of decision-making hampers design and implementation of effective policies.
- The **production of scientific knowledge** in this field continues to be characterized by **high fragmentation** between the natural, technical, and social sciences, which remains a significant factor affecting the pace of progress in tackling the challenges.

# Opportunities and recommendations

- Achieving the universalization of access to essential water services as envisaged in SDG 6 is an **inclusive political project**, which by definition cannot be achieved through exclusionary politics, such as the commodification of water and water services.
- It will require **long-term planning**, not just to build the infrastructures and extend coverage, but also to make the **systems sustainable (resilient?)** and the services available to all independently of the capacity of individuals and families to pay.
- The public policies required to achieve the universalisation of essential water services must be grounded on the **principles of equality and inclusion**, and must subordinate economic efficiency and private profit to the **higher goals of democratic wealth distribution and civilized wellbeing**.

# Opportunities and recommendations

- Successfully tackling the challenges facing the SDGs requires **radical socio-technical solutions**. In particular, requires breaking with the prevailing status quo dominated by technology-centred, top-down, often paternalistic and even authoritarian solutions in the provision of water services that **tend to privilege short-term interests over the common good**.
- Public policies related to essential public services must be oriented at **strengthening the capacities of public authorities** to deliver and regulate the provision of safe quality services.
- Governments and international institutions must **invest heavily** in the **provision and long-term maintenance** of the required infrastructure and management operations. These investments must privilege **broad and long-term social “returns”** (in public health, quality of life, etc.) over short-term economic gains.

# Opportunities and recommendations

- The revitalization of the Global Partnership for Sustainable Development envisaged in SDG 17 must radically change the prevailing emphasis on public-private partnerships, that often has served to promote privatization and mercantilization, and **strongly support the development of public-public, public-community, and community-community partnerships to achieve SDG 6.**



**Closure: humble but inspiring lessons from water research ...**

