



Risks and impacts of the **commodification** and **financialization** of water on the human rights to safe drinking water and sanitation

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Introduction

Water is one of the key elements of life, like the oxygen we breathe. For this reason, it has traditionally been considered a common good. However, stemming from the neoliberal perspective that emerged in the 1970s, water is most often considered an economic good that must be managed under the logic of the market, as a commodity.

The commodification of water use rights is generating, de facto, a progressive private appropriation of water by managing it as if it belonged to those who only received the right to use it, weakening the rules and priorities established in the concession systems (legal framework for allocating water use licenses). This development puts at risk the exercise of human rights, especially for those living in poverty, as well as the sustainability of aquatic ecosystems.

The increasing risks of water scarcity due to climate change threaten all water uses, but especially those linked to the enjoyment of the human rights to safe drinking water and sanitation of the most impoverished. In this context, the commodification of water and even speculation are presented as ways to better manage water scarcity. However, the truth is that these methods increase the vulnerability of the most impoverished and aggravate the unsustainability of the aquatic ecosystems - the two key factors in deepening the global water crisis.

The Special Rapporteur advocates the need to counter the commodification of water and to promote integrated management of the various sources, functions and uses of water, from an ecosystemic perspective and a human rights-based approach.

Key definitions

"Privatisation", in line with the former Special Rapporteur's report (A/75/208), refers to the delegation of public water and sanitation services management for-profit actors, whether private companies or public-private partnerships. Privatisation can refer also to the private ownership of water as a resource or of the infrastructure required to manage water and sanitation services.

"Commodification" of water, in the current report, refers to water as a resource, insofar as it is handled as a commodity under supply and demand dynamics as a way of setting the price of market transactions between users. Although in some cases water may be privately owned, in most cases, this commodification operates from the water trading markets over water concessions (water use rights or licenses), with water formally being publicly owned.

The term **"financialization"**, as a global phenomenon that dominates the economy as a whole, is used in this report to refer to water management as a financial asset whose value is managed on the financial markets, and in particular on the futures markets, under the speculative logic and strategies that dominate this type of market, with large banks and institutional investors as the main players. It is also used to express the growing influence of these financial actors in the development of infrastructures for water, sanitation and hygiene (WASH) services.

Valuing water from a historical perspective



During the **19th century**, the magnitude of investments and the difficulties in recovering costs meant that the State took over the management of water infrastructures. The use of the resulting water resources was shared through the concession (granting or license) of water use rights to private or public actors.

The paradigm of the domination of nature developed in water management when civil engineering made possible the construction of artificial rivers in the **18th century**, and later, dams to regulate and divert water flows.



From the **1970s** onwards, the emerging neoliberalism criticizes the public management model in force throughout the 20th century. It understands water as an economic good that can be divided, appropriated and commodified.

Throughout the **20th century**, this management model, extended from Western countries to a large part of the world, suffered notable perversions and biases in favour of powerful economic interests organised in various lobbies.



In the **1980s** new privatisation management strategies emerged through contracts, combined with public-private partnership business models promoted by the major multinationals in the sector.

Valuing water today

Many of the values and functions of water go beyond the logic of the market. Values linked to the uses and functions of water that are not even consistently exchangeable for money, such as the value of health, social cohesion, the sustainability of rivers, lakes and wetlands or the fulfilment of human rights. In raising these considerations, the Special Rapporteur does not intend to criticize the market per se, but to question it as an inappropriate tool for managing values that it cannot even recognize.

In the view of the Special Rapporteur, there is a need to set legal priorities for the different uses and functions of water on the basis of discerning the following ethical ranges:

- the highest priority must be given to water for life, in the uses and functions that sustain life in general and in particular the life and dignity of people;
- a second level of priority should be water in functions, services and activities of public interest;
- water for economic development must be managed as a third level of priority;
- and finally, water uses that put life and public health at risk should be outlawed and banned.



Life and dignity



Public interest



Economic Development



Crime

Commodification of Water

The increasing private appropriation of water

In 1992, the Dublin Statement on Water and Sustainable Development, while formally recognizing in its first principle that water is essential to sustain life and the environment, ends in its fourth principle by proposing that it be managed as an economic good; an approach that serves as a basis for its consideration even as a financial asset, managed according to the logic of speculation, as has been done with economic goods in general, within the dynamics of the financialization of the economy.

Context of growing private appropriation of concessions

Government management has suffered from rigidity, opacity and bureaucracy over the decades and the droughts of the late twentieth century highlighted these problems in several countries. This provided arguments for promoting reforms that allowed the purchase and sale of water concession rights, with the aim of making the concession system more flexible to better manage scarcity.

The different water trading markets emerged. These were initially subject to regulatory conditions, linking the duration of contracts to drought cycles, establishing environmental restrictions or providing compensation for impacts on third parties.

In general, the influence of powerful actors and unequal access to information have led to increasing problems of opacity, while regulatory measures have been relaxed or have disappeared, favouring a growing private appropriation of water.

Consequences for the human rights to water and sanitation

The management of water as a commodity has weakened its consideration as a public good, and weakened the role of the State as guarantor of the general interest, of the enjoyment of the human rights to safe drinking water and sanitation and of the sustainability of aquatic ecosystems.

Priority for personal and domestic uses have tended to be relegated and replaced by the purchase of rights, with the risk of abusive prices and unaffordable tariffs for people living in poverty.

With this commodified approach, in a number of countries where water trading markets have been legalized, the allocation of water to guarantee the sustainability of aquatic ecosystems has also tended to be managed through the market, treating the environment as just another user, and not as the basis of life.

Additionally, the development of water trading markets has in fact weakened the ability of concession systems to adjust and adapt the actual water supply to actual water availability in future climate change scenarios, from the logic of the general interest and the priority of human rights and ecosystem sustainability.

i Any concession establishes a use license for a specific amount of water, but if there is less water available due to drought, the responsible institution reduces the water supply foreseen in the concession according to the available water. In addition, this water supply must respect the priorities of use established by law - such as domestic supply or ecological flows.

Experiences of water trading markets in the world

Two of the most serious problems which are intended to be treated as scarcity problems through water trading markets, are the **over-exploitation of aquifers** and the **over-allocation of water rights above the real sustainable availability** of flows in ecosystems. Both problems have been generated by unsustainable management approaches and will undoubtedly be aggravated by climate change. In both cases water trading markets do not solve the problems, but rather complicate them insofar as it is necessary to distinguish what are known as "paper rights", that have no real guarantee of available water, and "wet rights", with real water behind.

In California, water trading was presented as a way to incentivize savings, but functioned mostly as a means to transfer water concessions on the traditional "first in time, first in line" principle (where the first to take water for a "beneficial use" is entitled to continue to use it for that purpose) to the most productive users who can pay more for those rights in the market.

In Spain, in 1999, two market options for concession rights were introduced: trading centres and cession contracts. The trading centres are institutions through which public agencies responsible for basin management can recover concession rights in anticipation of possible droughts by offering financial compensation for doing so. The cession contracts are agreements between private parties. Both options were initially limited to the management of shortages in drought cycles and were subject to regulatory rules that have been progressively relaxed.

In Chile, as in many other countries, a large part of water rights were linked to land rights. The Water Code in 1981 decoupled water rights from land, to facilitate their commodification. Much of the river flows were assigned to large hydroelectric companies, which have since been able to use or sell them.

Following a long series of over-allocation crises in the Murray Darling Basin in Australia, other water trading markets were approved in Australia. The market evolved slowly throughout the 1990s as a tool for reallocating water through the purchase and sale of rights, but grew rapidly in the 2000s as a process of deregulation took place.

Although the different water trading markets have developed in particular historical and political contexts, the four countries considered have common elements:



Separation of water from land to allow water commodification



Deregulation of water rights trading between users and between different kind of uses.



Transition from public regulated tariffs, usually for non-profit cost recovery, to market water pricing.



Increasing de facto private appropriation of water, marginalization of vulnerable users and disregard for affected third parties and non-productive values.



Environment tends to become just another market actor, forcing the State to purchase water rights to ensure the sustainability of ecosystems.

*While Australia, Chile, Spain and the United States are not the only countries where water trading markets have been legalized, they are the ones with the most developed experiences of this type of practice. According to a 2016 report by the Nature Conservancy, 37 countries have water trading. By focusing on those four countries, however, the aim is to identify trends that characterize the commodification of water and to assess their human rights implications

The way forward: managing scarcity through democratic water governance

Throughout the 20th century, the so-called supply-side approach dominated, according to which the State should not only finance but even subsidize large hydraulic works, without even guaranteeing that the benefits would outweigh the costs or considering the environmental and social impacts on the ecosystems and affected territories.

Certainly, the unsustainability of the supply-side approach throughout the 20th century makes it necessary to redefine the general interest of society in the 21st century, assuming the new paradigm of sustainability, the priority of guaranteeing human rights to safe drinking water and sanitation and reinforcing the consideration of water as a public good. It is also necessary to overcome the lack of economic rationality of supply-side approaches but by promoting a new sustainable economic rationale based on the ecosystem approach; rivers can no longer be managed as mere water resource channels but as living ecosystems.

In short, it is necessary to develop a **democratic governance of water** that guarantees human rights and environmental sustainability, assuming transparency and participation of the people as the keys to fight bureaucratic opacity and promote efficiency.



In cases of overexploitation of aquifers where groundwater is privately owned, it is necessary, first and foremost, to establish public control over these aquifers to promote management plans and review existing water rights in order to ensure sustainability, priority of drink water supply and the fulfilment of the human rights to drinking water and sanitation, counting on the participation of the entire affected population.



In cases of over-allocation of public water rights, it is necessary to clearly establish that these rights will be exercised in proportion to the actual water availability or to promote a process of review of concessionary rights, with transparency, broad public participation and fair compensation, in order to ensure sustainability and prioritisation of the human rights to safe drinking water and sanitation.



Human rights-compliant economic tools

Beyond ensuring respect for sustainability limits and prioritising human rights, economic tools, institutions and strategies are needed to promote responsible, efficient and sustainable water use and management. But in this regard, it is necessary to remember that market logic is not the only possible economic logic. An example of such economic tools could be the tariff strategy of water and sanitation services by consumption blocks with increasing prices.

The basic block, adjusted to what is considered the amount necessary for a dignified life, in compliance with the human rights to safe drinking water and sanitation, should be affordable, and even free in certain circumstances. The second consumption block could have a cost recovery tariff. But the higher consumption blocks should have much higher prices, generating a cross-subsidy from luxury to basic uses. Market logic would do the opposite, charging cheaper for the higher consumption blocks to incentivise consumption and ultimately increase profits.

Water banks in California or the trading centres in Spain could be also good examples. The fact that the economic compensation for recovering the concession rights is set by the responsible public institution and not by a free-market dynamic allows to maintaining an effective control over water as a public good, avoiding abusive prices and promoting an adequate regulation.

Financialization of water

Futures markets and the financialization of WASH infrastructures

From being institutions at the service of productive activity, banks have come in recent years to direct activity from a speculative logic based on the principle of maximising short-term profits, which often disturbs productive development and the general interest of society.

The process of financialization transforms debt into financial securities that multiply in the hands of banks and financial institutions, which thus become issuers of new financial products, under scarce and ineffective regulatory measures. In short, complex and powerful network of financial institutions end up issuing debt and financial products, as if they were currency, without effective control by the corresponding states and central banks and with no guarantee of real wealth to back them up.

In this context, two issues of concern for the human rights to water and sanitation are assessed in this report: the entry of water to the futures markets and the financialization of WASH infrastructures.

Futures markets

On 7 December 2020, for the first time in history, a tradable water price futures index was launched on the Chicago Stock Exchange on the Nasdaq Veles California Water Index (NQH2O). Nasdaq developed the NQH2O Index in partnership with Veles Water Limited.



Futures markets are spaces in which producers, large distributors and consumers negotiate and sign futures contracts for agricultural products and all kinds of raw materials. Traditionally, in these futures markets, both distributors and producers seek to reduce the risks associated with the uncertainties of the future, to establish futures prices and even to stabilise those prices. These futures contracts can be traded, bought or sold, as is the case of equities, on markets where speculative processes are fuelled.

Historical evolution of the Futures Markets



Futures markets **until the 1990s** performed functions of risk reduction, price discovery and price stabilisation. In the case of food, for example, farmers, food processors, distributors and traders of agricultural products dominated the share of futures contracts.



In the **mid-1990s**, commodities were included in the portfolios of major investors. At that time, there was no significant relationship between the evolution of commodity prices and values of stocks and bonds on stock exchanges. Investment in commodity futures could offset the risks of falling stock and bond values.



Also in the **mid-1990s**, financial deregulation opened up space for shadow trading without regulatory control and allowed banks and other powerful financial players to enter into commodity speculation.

From **around 2004**, institutional investors, driven by speculative logic, came to control commodities markets. As a result, the logic of short-term speculation and profit maximisation came to dominate.

The speculative food price bubble in 2008

As this is the first water futures market, no data are available. However, given that there have been futures markets for food commodities, we can assess the impact of these to better understand what can be expected from these futures markets when managing commodities on which human rights and basic needs of the population depend.

From the early 2000s, a speculative strategy began to take hold in which institutional speculators started to systematically buy futures contracts at increasing prices on the expectation that prices would continue to rise and they could make more money, while industrial consumers of raw materials bought also, driven by the fear that prices would be higher in the future.

Speculative investment in commodities soared, with \$317 billion in 2008, fueling a speculative bubble; the price of maize tripled, wheat rose by 127 per cent and rice by 170 per cent; according to the World Bank, this price rises pushed between 130 million and 150 million more people into extreme poverty

Studies were published on the 2008 food crisis that justified the accelerated growth of agricultural prices on the increasing demand for raw materials from China and the diversion of foodstuffs, such as corn, to produce ethanol.

However, the former Rapporteur on right to food, Olivier De Schutter had a different assessment. According to him, although the causes were multiple, this accelerated rise in food prices and their volatility can only be explained by speculation on the futures markets, with the consequent appearance of a speculative bubble.

A growing consensus has emerged both in international institutions, inside and outside the UN system, as in the international scientific community, calling for oversight and transparency in commodity markets and suggesting a conscious effort to intervene to deflate and avoid speculative bubbles. Moreover, it has been empirically established that when speculators drive up futures prices, the effects are immediately felt in spot commodity prices.

Comparing water and food markets

Similarities

Like food futures, water futures, embedded in complex financial products, will be traded through automated and hyper-technified processes in which powerful investors often operate opaquely, in permitted shadow spaces, outside of official controls.

Water futures contracts, like food futures contracts, are subject to the same kind of speculative strategies, so similar phenomena and dynamics can be expected.

Water and food are linked to the human rights and basic needs on which the lives and dignity of billions of impoverished people depend. Therefore, the mere possibility that the management of water in futures markets could generate price spikes and volatility similar to those generated in food should, at the very least, raise concerns and motivate preventive measures.

Differences

Food markets can move in global frameworks. Transfers of water rights, however, due to the high costs involved, take place between users or actors within the same basin or basins connected by water transfer infrastructures.

Water depends to a much greater extent on the natural water cycle in the territory, which requires an ecosystem management approach that contradicts its management as a commodity.

In addition, water rights are often subject to regulatory standards as a public good, as well as legal priorities, making their commodification difficult.

Lessons from food futures markets

What the experience of recent decades in the futures markets for food and other commodities has shown is that the prevailing speculative dynamics, emerging since deregulation, far from stabilising prices tend to increase their volatility and generate speculative bubbles. If the speculative dynamics of the futures markets were to impact on the price of water on the ground, as has been happening with food, these costs would be passed on to water and sanitation charges, increasing the risk non-payment and water cuts among the poorest.



The arguments that were used at the time to liberalise food speculation are used today to justify the entry of water into futures markets. Given the effects that speculative strategies have had and are having on the human right to food for the most impoverished, it is essential to take this experience into consideration in order to prevent what may happen with water futures markets, especially with regard to the human rights to safe drinking water and sanitation.

The way forward: strategies to cope with climate change-related scarcity risks

States have the obligation to prevent the risks arising from ongoing climate change and to minimise the vulnerability of society as a whole, especially the most impoverished. The measures proposed by experts and the main leading international institutions are not based on speculation but focus on promoting participatory climate change adaptation strategies in the context of the democratic water governance, thus protecting the human rights to safe drinking water and sanitation through measures such as the following:



Designing and promote hydrological, territorial and urban planning in order to strengthen environmental and social resilience in the face of drought and flood risks;



restoring aquatic ecosystems to a healthy state;



putting an end to the abusive exploitation of aquifers to recover them as strategic natural reserves that allow future droughts to be managed;



promoting public consultation processes to build the bases to adapt the concession rights to the new realities imposed by climate change;



developing modular strategies to produce quality water in a flexible way, adapted to drought cycles, thanks to new technologies and using renewable energies - desalination of seawater in coastal areas, regeneration and reuse of returns...-;



strengthening the concession system with transparent public institutions (such as Water Banks) to negotiate the recovery of water rights with fair compensation and reallocate them in droughts, under adequate social and environmental regulations;



and finally, an issue that is often forgotten or taken for granted: effectively prioritizing the human rights to water and sanitation in these difficult circumstances, especially for those living in the greatest vulnerability.

Financialisation of WASH infrastructures

The financialization of WASH infrastructures in times of economic crisis

Traditionally, investment in large-scale water infrastructure has been seen as a State obligation, mobilising public budgets and low-cost public loans. Today, however, there is increasing pressure for financial players and water-based investment funds to buy, build and/or manage water infrastructure.

In fact, this trend is having a negative impact on water and sanitation services, for two main reasons:



it tends to make them more expensive,



it leads to the prioritisation of short-term speculative strategies that benefits more for investors than for users, relegating the human rights of the most impoverished.

This seems to have happened with Thames Water when Macquarie Bank took control of this large British operator in 2006, borrowing £2.8 billion to make the £5.1 billion purchase. The company's debts soared, maintenance and service delivery deteriorated, but nevertheless shareholder returns soared. Macquarie's management used Thames Water to borrow £2 billion for the benefit of the bank and its investors. When Macquarie sold Thames Water in 2017, the financial engineering practised left an indebted company and the highest rates in the UK for its 15 million users.

After the bursting of the financial-real estate bubble of 2008 and the consequent economic crisis, the strategy that prevailed in the world was to rescue the largest financial firms with huge public funds. Governments, having given unconditional credit to the primary authors of the crisis, then implemented so-called "austerity" strategies that weakened public capacities to meet the basic needs of the population.

The impact of these strategies was particularly felt by municipalities almost everywhere in the world, which were subject to true financial cutting. The crisis of municipal finance opened a space for the privatization of water and sanitation services. Today, in the midst of the current economic crisis aggravated by the Covid-19 pandemic, the 'financial gap argument', to justify private financialization due to a lack of public funding available to develop the necessary infrastructure for climate change adaptation, is unacceptable. Today's strategy for dealing with the pandemic and post-pandemic, under the so-called Green New Deal, is based on the availability of huge public funds; the question is one of priorities.

The way forward: learning from the pandemic to tackle climate change



After the pandemic, there is general consensus on the need to strengthen our public health systems, as a collective not-for-profit effort, with the aim of protecting the health of all, leaving no one behind. In this case, nobody talks about a public financial gap. we should remember that water and sanitation services are the cornerstone of public health and therefore deserve to be integrated into this consensus and approach.

It is therefore necessary and feasible for national budgets and international public financial institutions to prioritise funding for the necessary investments in water, sanitation and hygiene services, both to adapt to climate change and to strengthen public health systems. A multi-year public investment plan, with specific attention to local institutions, should resolve the so-called financial gap in WASH services and infrastructure to meet SDG 6.

Conclusions and Recommendations

In a general context of increasing pressures to commodify and financialize water management and the management of water and sanitation services, it is more necessary than ever in all countries to explicitly recognize drinking water and sanitation as human rights, to manage water as a public good and to promote comprehensive water legislation based on the principle of sustainability and the human rights approach.

Faced with the logic of the market and financial speculation, in which those who decide are those with the greatest economic capacity, and faced with the ongoing climate change, the challenge is to develop democratic water governance with the human rights to drinking water and sanitation and the sustainability of aquatic ecosystems as a priority.

Based on these conclusions:

1. Regulatory frameworks on water concession agreements

The Special Rapporteur recommends that States adopt and strengthen regulatory frameworks on water concession agreements to manage water as a public good fundamental for life and health, rather than as a commodity that can be traded.

Such regulatory frameworks should:

- (a) be aligned with human rights
- (b) promote aquatic ecosystems sustainability;
- (c) be established and implemented in a transparent manner with public participation;
- (d) complement the framework of concession rights with public institutions, to recover water use rights in exchange for fair compensation and reallocate them in drought crises to users in emergency situation.

2. Public consultation

In countries where water trading markets are used as a water management tool, States should convene public consultation processes, in order to assess whether or not these markets are serving the public interest and determine whether they should be abolished or more strictly regulated.

Such assessment should pay attention to:

- (a) the impacts on the affordability of accessing water and sanitation service and facilities for impoverished people;
- (b) the sustainability of aquatic ecosystems;
- (c) transparency and public control through public registration systems of contracts, buyers, sellers, origin of the resource, prices, etc., to avoid speculative practices and abusive prices.

3. Climate adaptation strategies

Given the alleged justification of futures markets as a tool to cope with drought shortages in climate change, the Special Rapporteur not only rejects this argument, but recommends States uphold their obligations under the United Nations Framework Convention on Climate Change and immediately plan, design and implement climate change adaptation strategies with a human rights-based approach as the effective way to address water scarcity under the perspective of the ongoing climate change.

Such strategies should include elements such as, but not limited to:

- (a) participatory process where all affected persons and groups are consulted
- (b) updating and adapting concession rights of use to water availability under foreseeable climate change scenarios;
- (c) effectively ending the abusive exploitation of aquifers so that they can operate as strategic drought reserves;
- (d) promoting territorial and hydrological planning that limits future demands to foreseeable availabilities and prioritizes quality water to guarantee compliance with human rights to drinking water and sanitation;
- (e) and promote Public Water Banks in water-stressed river basins.

4. Preventing the entry of water into futures markets

The Special Rapporteur recommends that States take urgent legal measures to prevent water, as a public good, from being managed in the futures markets as a financial asset under the speculative logic that presides over these markets, avoiding the risks of price volatility and speculative bubbles that threaten the human rights to drinking water and sanitation of those living in conditions of poverty and vulnerability, the sustainability of aquatic ecosystems and the most vulnerable economies.

5. Public funding for water, climate adaptation, and public health protection

The Special Rapporteur further recommends that States report on projects and investments in water, sanitation and hygiene infrastructure to adapt to climate change with a human rights-based approach in their annual National Adaptation Plan submissions to the UNFCCC Secretariat.

At a key moment when acceleration is needed to meet SDG 6 and a lack of public funding for investments in WASH services ("financing gap") is argued, the Special Rapporteur recommends that all States, but especially the most powerful, as well as the World Bank, within the framework of the new strategies for socio-economic recovery after the pandemic, give priority to public funds that make it possible to face the necessary investments in water, sanitation and hygiene to meet SDG 6, paying special attention to empowering local and community institutions responsible for water and sanitation services.

In line with the recent proposal by the Special Rapporteur on extreme poverty and human rights (see A/HRC/47/36), the Special Rapporteur recommends the creation of a global fund for social protection to protect the entire world population from future pandemics, which would include financial protection for ensuring drinking water and sanitation in populations in situations of greater vulnerability.



**UN Special Rapporteur on the human rights to
safe drinking water and sanitation**

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