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# **The Value of Water in Bolivia: An Economic Resource or a Human Right?**

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## **Abstract**

After the 2000 ‘Water-War’, access to water in Bolivia has become a major social demand and thus a prime and contentious political issue. The event has revealed an overwhelming opposition to neo-liberal approaches to water management and has allowed the articulation of a new discourse that sees water not as an economic resource but as a human right. In this context, the paper reviews the two contrasting positions within the debate about whether or not water should be treated as an economic resource. In doing so, it presents the arguments underpinning each position which then allows it to elaborate some relevant conclusions.

**Key words:** Value of water, Bolivia, economic resource, water-war, market value, indigenous knowledge, cultural value.

**JEL Classifications:** Q20, Q25.

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## 1. Introduction

One of the most distinctive features of the new Bolivian constitution is what the vice-president, Alvaro Garcia Linera, calls the ‘extension of peoples’ rights’ (Stefanoni 2007). According to this notion, the state must guarantee total provision of basic services and needs such as water, food, energy, telecommunications and others which are now considered fundamental human rights<sup>1</sup>. The notion is part of the government’s more comprehensive - although not yet fully constructed - development ideology of “living well” (Castañón 2009). While the idea reflects the essence of the social demands that have put Evo Morales into office (i.e. more control over the country’s natural resources and a more equal distribution of their benefits), it is certainly not enough to write constitutional articles to establish these rights. The challenge rather is how to convert written statements into reality. Focusing specifically on water, the present article seeks to contribute to the current debate regarding water management in Bolivia and particularly to the key dispute about whether or not water should be considered an economic resource. It does so by reviewing the two contrasting positions: water is an economic resource and water is not an economic resource<sup>2</sup>.

In the last years, right to water in Bolivia has become a core interest for the population and thus an important and contentious political issue. This is particularly true for peasants and indigenous groups whose livelihoods, mostly rural, are deeply connected to water. Although it is fair to say that water has also become an important concern for urban citizens who, irritated by attempts to raise rates, have decided to take part on the issue. The current water policy of Evo Morales’ administration is to treat water not as an economic resource but as a human right for all Bolivian citizens, as it has been already suggested. However, before starting to review the arguments underpinning the government’s position as well as its antithesis, it is pertinent to put the analysis into context by briefly describing two central issues that have marked and shaped the current water debate in the country.

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<sup>1</sup> See second chapter ‘Fundamental Rights’ of the Second Title of the new Bolivian constitution.

<sup>2</sup> In the context of this paper, the notion that water is not an economic resource is fully compatible to the notion of water as a human right. Thus, both notions are used interchangeably.

Sustainability is one of the two central issues involved in the current water debate not only in Bolivia but in a global scale. Following important international meetings such as the 1992 Rio 'Earth Summit' and the 2002 World Summit on Sustainable Development held in the city of Johannesburg, the issue of sustainability has permeated development thought and action. Although often questioned for its ambiguity and contradictions (Redclift 1987, Adams 2009), the notion has become a mantra permeating every aspect of water-resource management. Studies showing the deleterious effects of humans on the environment and the re-emergence of neo-Malthusian views of scarcity in a world that is likely to double its current population in decades to come, have inflated concerns about a more efficient and sustainable use of the planet's natural resources (Adams 2009). Water has been at the centre of these concerns given its enormous importance for humans' daily life and for the economy as a whole. Particularly, the allocation of superficial and ground water has become the main challenge facing development planners. Such challenge becomes even more complex due to the increasingly scarcity of these types of water resulting from growing demand and processes of degradation and contamination (Koundouri and Kountouris 2008). The sustainability concern is a key element within the 'value of water debate' which is also addressed by advocates of the two contrasting positions that this paper will examine.

The second central issue that has profoundly shaped the contemporary water debate in Bolivia has been a massive popular protest commonly known as the 'Water-War'<sup>3</sup>. This huge movement united an unprecedented number of popular sectors to demonstrate against the government's plans to privatize water services in Cochabamba, central Bolivia. After months of protests, people forced President Hugo Banzer Suarez to cancel a contract with an international consortium led by the US-based company Bechtel (Bustamante 2004). While the event has been celebrated worldwide as an important victory over the corporations' interests (Assies 2003), in Bolivia it has had two main repercussions. First, this major event has revealed an overwhelming opposition to neo-

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<sup>3</sup> For a comprehensive discussion about the Water-War in Bolivia see Assies (2003); Bustamante (2004); Perreault (2006).

liberal approaches to water management, which eventually paved the way for the expulsion of neo-liberal governments. Second, and perhaps consequently, it has allowed the articulation of a new water discourse in the country that sees water as a human right that cannot be treated as an economic resource. Using the words of Oscar Olivera<sup>4</sup>: “water is a collective good, a right for everyone, as the irrigators say, not only for human beings, but also for animals and plants” (Perreault 2006, p 159-160).

Politically, the Water-War has been highly significant for the consolidation of Evo Morales’s party – *Movimiento al Socialismo* (MAS) – that at that time represented the strongest opposition option (Zegada 2010). As a consequence, the demonstrators’ stance regarding water management has been fully embraced by the current administration. In fact, the notion of water as a human right – and hence not an economic resource - has become a milestone for the government, a key ‘social conquest’ in the new constitution and, judging from several speeches and personal efforts, a core interest for the president himself. What is not yet clear, however, is how exactly the government pretends to allocate significant amounts of water to distant communities and the Bolivian population as a whole, in a sustainable manner, without imposing market and economic mechanisms on the population. This is notably more difficult in the semi-arid regions in the eastern part of the country where the most vulnerable communities inhabit. Clearly, the answer to such a challenge is highly complex and lies beyond this paper. Rather, the aim of this article is modest: to provide a compact review of the two positions surrounding the debate about whether or not water should be treated as an economic resource, positions that this paper now turns to describe.

## **2. First position: Water is an economic resource**

*“....the principles of precaution and sustainability might be better served by using economics to determine efficient ways of delivering politically and legally defined*

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<sup>4</sup> Oscar Olivera was head of the ‘Coordinator for the defence of water and life’ the central player in the water-war.

*standards of service and quality than for defining the principles in the first place”*  
(Morris 1996 cited by Allan 2002, p 120)

Based on Ricardian concepts of classical economics, the idea that water is an economic resource is only recently gathering pace. Northern countries started to discuss the notion in the 1980s and their southern counterparts in the 1990s under the strong influence of the World Bank and the European Investment Bank (Allan 2002). At the heart of the argument lies the classical notion that sees the market as the more efficient mechanism to regulate the interactions between society and the natural environment (Adams 2009). In this regard, advocates claim that water is like any other economic good for which there is supply and demand and consequently a pricing mechanism will find equilibrium between the two. The arguments in favour of this position stem from the field of resource economics where the ‘market value’ is paramount to ensure an efficient and sustainable water management. Market value is then “equivalent to water rates based on economic principles of water-resource pricing” (Hoffmann 2008).

The principles of ‘marginal cost pricing’ and ‘equimarginal value in use’ are central to illustrate the economic reasoning underpinning this position. Economists argue that a combination of the aforementioned principles is critical whenever costs are incurred in the provision of water supplies to customers. Thus, if more water resources are needed in a certain area, these can always be made available at a given marginal cost that covers the additional activities of acquisition, transport, treatment and so on. It is argued then that a customer can have access to additional units only if he or she is willing to pay for the marginal costs incurred. However, marginal costs will necessarily differ according to certain considerations such as location, types of service, use patterns, etc. To address this issue, economists pose the second principle of ‘equimarginal value in use’ that basically dictates making the price equal for all customers in a class –defined as a group of consumers with identical cost conditions - while between classes prices should differ according to the marginal costs involved in serving such classes (Hoffmann 2008). In other words, pricing should be designed so that it covers the marginal costs of serving each class and given that conditions amongst classes will differ so will their prices.

A second argument underpinning this position asserts that market-driven approaches to water ensure a more efficient allocation of the resource. Drawing from the distinctive work of Professor Tony Allan<sup>5</sup> – the 2008 Stockholm Water Prize<sup>6</sup> laureate – the notion suggests that water must be allocated or re-allocated to high economic return activities, what has been termed ‘allocative efficiency’ (Allan 2002). Supporters highlight that the idea applies to every single sector of the economy. In agriculture, as one instance, one cubic meter used for the production of oranges yields 10 times as much as it would have if used in grain production (Turton et al. 2003). The same cubic meter used in aluminium refined can yield about 3411 times more than used for wheat (Turton et al. 2003). Whether within sectors (e.g. from cereals to flowers) or between sectors (e.g. from agriculture to industry), the argument asserts that reallocation of water to the most profitable activities, will allow economic entities such as regions or national economies to generate economically sustainable livelihoods. Advocates insist that this is even more vital for those economic entities that are either water short or economically incapable of delivering more available water. To illustrate in a simple manner, Allan (2002) argues that instead of trying to get ‘more crops per drop’ the aim should be to get ‘more jobs per drop’.

Regarding sustainability concerns, economists proudly claim that the implementation of market prices to water is indeed an ecologically-sound stance. According to them, sustainability would only be possible if strong market mechanisms are in place to ensure an efficient utilization of water. They depart from the acknowledgement that higher prices of water are likely to emerge with increasing scarcity and spatial imbalances of water. Such price increases, so advocates argue, represents a positive market signal that will generate the following efficient reactions. First, consumption of this increasingly scarce resource would decrease or become more ‘conscious’ as a result of being more expensive. Second, innovation is likely to take place to find more efficient ways to manage water so that the market demand is met. Third, when facing scarcity problems,

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<sup>5</sup> Tony Allan is currently Emeritus Professor of the Department of Geography at King’s College London.

<sup>6</sup> The Stockholm Water Prize is the world’s most prestigious award in water-related studies. It is commonly considered the equivalent of the Nobel Prize on issues concerning water.

decisions-makers will allocate the resource in the most efficient activities that give more economic returns which in turn is likely to improve people's livelihoods and well-being. Therefore, the economists' argument claims that sustainability is directly dependant upon efficiency in water use (Koundouri and Kountouris 2008).

### **3. Second position: Water is not an economic resource<sup>7</sup>**

*“Water flows up-hill to money and power” (Reisner 1993 cited by Allan 2002, p159)*

Even if economists are right about the critical importance of market-driven mechanisms to ensure a sustainable delivery of water, they cannot deny that water possesses many values beyond the economical sphere. The assertion of the existence of other values attached to water is one of the key arguments supporting this position. Cultures and peoples around the world have connected myriad social, cultural, and traditional values to water (Allan 2002). In Bolivia, cultures throughout the territory see water as a vital element that is at the centre of their philosophical visions of life. In the Aymara case, for instance, water is regarded as an indispensable element within their life philosophy called ‘*Suma Qamaña*’ or ‘living well’ for its English translation. In fact, this Andean culture sees water as a god-like entity that helps to maintain the balance in nature and protect rivers and lakes. The Aymara people even have a particular name for water ‘*Qucha Mama*’ which in English means ‘mother water’ (Medina 2001). Like the Aymaras, cultures tend to attribute profound cultural values to water that obviously cannot be fully captured by any market value. From a postcolonial stance, advocates tend to fiercely defend these cultural values attached to water arguing that such values – through the communal norms and institutions that embrace them - provide a solid ecological argument to support their position. Therefore, sustainability is not achieved by regulatory prices that ‘tame’ consumers’ behaviour but by endemic cultural norms and institutions that regulate individual action and integrate communal action towards a sustainable use

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<sup>7</sup> In the context of this paper, the notion that water is not an economic resource is fully compatible to the notion of water as a human right. Thus, both notions are used interchangeably.



of the collectively-owned natural resources. Proof of such efficiency, so advocates argue, is that sustainable levels of water have been maintained for millennia. The argument is consistent with those of the scholars of the commons (most notably Ostrom 1990, Murphree 1993) who regard such cultural norms and institutions as effective mechanisms for the control and management of natural resources, consequently rejecting the ‘tragedy’ posed by Hardin (1968) in his famous essay. While there is still a debate regarding the extent to which these cultural norms and institutions effectively manage natural resources, the fact that Elionor Ostrom – one of the most distinguished scholars of the commons – has recently being awarded the Nobel Prize for economics has represented an important backing for their argument.

A second line of argument supporting the position that water should not be treated as an economic resource attempts to question the reliability of the ‘market price’ as a controlling mechanism. Proponents have called attention to the volatility of the market especially with the advent of the current financial crisis. For instance, Shiva (2008) argues that the recent economic crisis is a clear example of such volatility if one takes into account that the market values of companies such as Lehman Brother have dropped sharply from \$38.4 billion to less than \$5 billion. Similarly, it has been argued that entire national economies have been severely hit by the financial crisis due to what critics of the dominant neo-liberal system call ‘an inevitable system failure’ (Harvey 2005). In the light of these facts, critics of the economic approach to water conclude that “in a world driven by greed and profits....assigning market prices to water is both absurd and irresponsible” (Shiva 2008).

Moreover, advocates of this position suggest that the economists’ argument that sees the market value as an efficient water management mechanism is fallacious. The following grounds are usually given to vindicate their assertion. First, critics tend to argue that the efficiency claimed by economists is not a comprehensive efficiency because it is solely based on economic reasoning. Thus, it undermines and even ignores other values such as social, environmental and cultural ones. Such argument is increasingly relevant in the current socio-political context of Bolivia where there are many calls, from both the

government and the NGO sector, to bring back indigenous knowledge and institutions. Second, market values, so the argument goes, do not control consumption but rather increase the luxury consumption moving water upwards to money, depriving many people of survival needs. Usual examples of this pattern include relocation of water from agriculture to industry. And given that the poorest and most vulnerable communities often rely on rural livelihoods, it is often concluded that this represents a clear example of water disposition. Thus, advocates of this position see water-pricing as a hidden tool to move water from poor to rich (Shiva 2008).

Another common argument posed by the proponents of water as a human right is based on moral imperatives of social justice. While the cause of social justice in development is – or at least it should be – a fundamental aim for activists, scholars and politicians alike, these morally-grounded arguments are often labelled – and then discarded - as naive or romantic especially by those deeply entrenched in agendas that promote the status-quo. Nevertheless, advocates continue highlighting devastating statistics of human poverty to demand bold action in tackling the poverty problem where the provision of safe drinking water and sanitation are amongst the top priorities. Further, they argue that people living in extreme poverty simply would not be able to afford any monetary cost of water and so if we are serious about addressing the needs of the poorest, water should be a human right and not another natural resource subject to commodification. Bolivia's president, Evo Morales, is an example of such a passionate activist. He has attended multiple meetings and forums to support this position with a strong discourse and a great legitimacy for being an indigenous individual himself (see for instance LibreRed 2010), although his achievements on this issue whether is in international arenas or in national ones are still very limited (Zegada 2010).

#### **4. Conclusions**

The paper has shortly reviewed the main arguments of the two contrasting positions within the debate about whether or not water should be treated as an economic resource.

As shown by the analysis, the two contrasting positions possess sharp differences that appear extremely difficult to reconcile. On efficiency grounds, economists seem to be right about the power of proper market signals to ensure efficiency in water use and allocation. However, given that the efficiency claimed is purely economical, water's essential non-market life-supporting values question its validity (Morris 1996). In terms of sustainability, the economic stance seems to be weaker if one takes into account that many natural resources subject of commodification (e.g. fisheries) are currently facing serious ecological pressures due to increasing market demand (Millennium Ecosystem Assessment 2005).

On the other hand, those who regard water not as an economic resource and claim its reconsideration as a human right, offer little substance with regard to the actual mechanisms that will ensure sustainability and efficiency. Nonetheless, their position, heavily based on pervasive moral and cultural arguments, is gaining ground at a time when there is a re-thinking of orthodox development practices by both scholars and practitioners (Chambers *et.al.* 1989; World Bank 1999). Further, it has been increasingly recognized that relevant forms of traditional knowledge and institutions have to be considered in management and decision-making processes regarding natural resources and ecosystems (Gorjestani 2000; Adams 2009). Besides, it is worth mentioning that the current social and political circumstances in Bolivia favour this position regardless of its problematic nature. Thus, a national water policy ignoring these arguments would raise legitimacy questions and would lack essential social support.

While the fierce debate between advocates of the two positions is likely to continue, it might be more useful to break the oversimplifying black or white binaries. The answer rather seems to rest in an approach that integrates both positions and visions of water. This is particularly true for Bolivia where the current socio-political situation demands the incorporation of traditional forms of knowledge into mainstream approaches to natural resource management. Furthermore, the notion of incorporating market and non-market values is being increasingly recognised as a key response for a better resource management by the world's leading experts and scholars. It is in this spirit that the

Millennium Ecosystem Assessment (2005 p.112) asserts that “[d]ecisions can be improved if they include the total economic value of alternative management options and involve deliberative mechanisms that bring to bear noneconomic considerations as well”.

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