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Thirsty for a Solution: Using the Rural Electrification Administration Model to Resolve the Failure of Privatization of Water Utilities in Bolivia

Michael Nichola

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THIRSTY FOR A SOLUTION:
USING THE RURAL ELECTRIFICATION ADMINISTRATION MODEL TO RESOLVE THE FAILURE OF PRIVATIZATION OF WATER UTILITIES IN BOLIVIA

Michael Nichola*

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INTRODUCTION

Water is crucial for life on earth to exist.¹ Without water, life cannot exist.² There is an ongoing debate in the international community whether the right to water is a fundamental human right.³ When considering the right to water, what is really at issue is access to clean drinking water. Several countries throughout the world have incorporated a fundamental right to access to clean drinking water in their constitutions, particularly in the developing world.⁴ However, there is a problem enforcing this right when over two billion people, even with this right enshrined in their constitutions, still lack access to clean drinking water.⁵

The solution that arose in the 1980s and 1990s was to privatize public utilities, with the idea that it takes private money to finance the expansion of access to water to those that are too poor or lack local

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². Id.
⁴. SVITLANA KRAVCHEKO & JOHN BONINE, HUMAN RIGHTS AND THE ENVIRONMENT CASES, LAW, AND POLICY 129-131 (2008) (discussing South Africa’s Constitution recognizing a right to sufficient water; although the right is not stated explicitly, the Indian courts have interpreted the right to life to include the right to clean and sufficient water; Argentina has an explicit right to water in its Constitution).
infrastructure.\(^6\) To this end, multilateral development banks, such as the World Bank, began requiring impoverished nations who had outstanding loans from the World Bank to privatize their public water utilities and their access to water to secure or maintain those nations' current outstanding loans.\(^7\)

However, when private companies take control of public utilities or a nation's entire access to water, they may attempt to raise prices on current access to water in order to obtain short-term profits.\(^8\) In countries such as Bolivia, these actions resulted in disruption of the water supply and civil unrest.\(^9\) Some countries, and in rare cases private companies, have completely abandoned the water privatization initiatives.\(^10\) The problem of the impoverished public utilities' inability to provide access to the poor is a serious problem worldwide. Even when there is an explicit fundamental right to water in a developing country's constitution, that nation's government loses all legitimacy when that nation's public utilities find themselves unable to provide access to water to all its citizens.\(^11\) This shortcoming, coupled with the private companies' inability to do the same, is a serious global problem. The solution to this challenge is a private-public partnership.

This paper will address the existing laws internationally and in Bolivia that address the right to water. Part I will address the evolution and current status of the recognition of a human's right to water. It will describe the growing trend of various nations' recognition of a fundamental right to water in their constitutions and also will address the global trend of privatization of water. Part II will discuss the World Bank and its involvement with Bolivia's privatization of its water supplies. Part III will address Bolivia's and its struggle with water rights, including the privatization of Cochabamba, Bolivia's third largest city, the civil unrest leading to the "water wars" of 2000, the outcome of the water wars, and the precarious situation Bolivia now faces with respect to access to water.

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10. Id.

11. Link, supra note 7, at 381.
Part IV proposes possible solutions to the problem of both the private and public inability to provide meaningful access to water for the peoples of Bolivia. The solution will begin by looking at the success of the United States’ Rural Electrification Administration and its possible application through micro-loans provided by the World Bank to the people of Bolivia. This solution could work within Bolivia’s current legal framework, to utilize both public and private entities to provide access to water for the poor and rural peoples of Bolivia. The proposed solution will provide a possible solution to make the human right to water an enforceable and legitimate human right not just in Bolivia, but also possibly throughout the developing world.

I. IS THERE A FUNDAMENTAL RIGHT TO WATER?

A. History of Fundamental Right to Water

1. Treaties

The United Nations’ principal judicial organ is the International Court of Justice (ICJ), which plays an important part in identifying and developing international law. Article 38(1) of the ICJ Statute identifies the five sources of international law: international conventions, international customary law, general principles of law, judicial decisions and scholarly writings. The main sources of international laws, also known as “hard law,” are international conventions, commonly known as treaties; international customary law; and general principles. Judicial decisions and scholarly writings are considered persuasive, and are known as “soft law.” To determine whether an idea such as the right to water is a fundamental human right, one must look to hard law.

At the international level, states have not reached a consensus to recognize water as a human right; however, several international human rights treaties indirectly protect the right to water. The International Covenant on Economic, Social and Cultural Rights (ICESCR) indirectly provides for the human right to water under Article 11(1), which addresses the right to adequate standard of living and Article

12(1), governing the right to health.\textsuperscript{15} In addition, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) Article 14(2)(h) provides “women the right: to enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply.”\textsuperscript{16} Similarly, Article 24 of the Convention on the Rights of the Child (CRC) states, “Parties shall take appropriate measure” to “combat disease and malnutrition, including within the framework of primary health care, though, inter alia. . .provision of adequate nutritious foods and clean drinking water.”\textsuperscript{17} Finally, the Convention on the Rights of Persons with Disabilities, in Article 28, provides for an adequate standard of living and social protection in that States parties “must ensure equal access by persons with disabilities to clean water services, and ensure access to appropriate and affordable services, devices and other assistance for disability-related needs.”\textsuperscript{18}

The Third Geneva Convention on the Treatment of Prisoners of War provides that “sufficient drinking water shall be supplied to prisoners of war,” and that “the Detaining Power shall supply prisoners of war who are being evacuated with sufficient food and potable water, and with the necessary clothing and medical attention.”\textsuperscript{19} Article 46 provides that “the Detaining Power shall supply prisoners of war during transfer with sufficient food and drinking water to keep them in good health, likewise with the necessary clothing, shelter and medical attention.”\textsuperscript{20}

None of these treaties casts the entitlement to water as a human right; instead, they place a duty on governments to ensure that water, among other things necessary to life and good health, is provided to members of insular member groups that have been identified as requiring special protection.\textsuperscript{21}

3. Declarations

In 2002, the United Nations Committee on Economic, Social and Cultural Rights adopted general comment 15 on the right to water.\textsuperscript{22} The general comment explains that the right to water is considered implicit in Articles 11 and 12 of the ICESCR covering the right to an adequate standard of living, and the right to health respectively.\textsuperscript{23} In 2006, the Sub-Commission on the Promotion and Protection of Human Rights adopted the guidelines for the realization of the right to drinking water and sanitation.\textsuperscript{24}

In July 2010, the United Nations General Assembly adopted a resolution, which “[recognizes] the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights.”\textsuperscript{25} Subsequently, the Human Rights Council, in September 2010, affirmed this recognition and clarified that the right is derived from the right to an adequate standard of living.\textsuperscript{26} The Human Rights Council, in March 2011, extended the mandate on water and sanitation, and changed its title to the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation.\textsuperscript{27}

\textsuperscript{21} Kravchenko & Bonine, supra note 4, at 118.
\textsuperscript{23} Id.
B. Constitutional Rights to Water

There are explicitly declared fundamental rights to water in constitutions throughout the world. On October 31, 2004, the people of Uruguay made history by becoming the first people in the world to vote and approve, by an almost two-thirds majority, an amendment to their constitution which enshrines a human right to water. The right not only explicitly states that access to safe water is a fundamental human right, but also states that there should be policies that create priorities to make sure everyone has access to drinking water and that social policies should be paramount to "economic considerations."

Bolivia’s recently drafted constitution explicitly states that its citizens have a constitutional right to water, and it is the responsibility of the Bolivian government to provide access to water to all of its citizens. Thus, there is no universal answer as to whether there is a fundamental human right to access to water. The answer largely depends on an individual’s location.

C. Trend of Commercialization of Water

1. What is privatized water?

The word “privatization” may imply water supplies free of government oversight or participation and completely in the hands of private individuals; however, this is rarely the case. Water privatization is simply “the transfer of ownership of water supply systems to private companies.” But it is much more complex in that privatization may refer to a variety of different partnerships between governments and private companies with “varying degrees of governmental control and oversight of water resources and infrastructure.” In fact, very few governments allow the water itself to go completely

28. Kravchenko & Bonine, supra note 4, at 129.
30. Uruguay Const. art. 47.
33. Miller, supra note 6, at 228.
34. Karren Bakker, Commons Versus Commodities, Debating the Human Right to Water, in The Right to Water, Politics, Governance and Social Struggles 25 (Farhana Sulana & Alex Loftus eds., 2012).
35. Miller, supra note 6, at 228.
into private ownership or permit completely unsupervised engagement of the private sector.\textsuperscript{36}

There are four different forms of water privatization.\textsuperscript{37} First and perhaps the simplest form of privatization are joint arrangements or mixed managements.\textsuperscript{38} In a mixed management arrangement, governments outsource specific tasks, such as operation and maintenance contracts, to private firms.\textsuperscript{39} The government still retains all ownership of the physical assets, such as the pipes and wells, but its level of oversight will vary according to the specific arrangement.\textsuperscript{40} Private firms are often able to provide both managerial and operational expertise to greatly improve efficiency.\textsuperscript{41} These arrangements offer much-needed flexibility for the government because they can vary in scope and duration and often include performance-based incentives and penalties that are not available in the public sector.\textsuperscript{42}

The second and most common form of privatization of the water supplies is concessions.\textsuperscript{43} Full concession arrangements transfer operational and management responsibility for entire water systems, including financial and commercial risk, to a private contractor for a fixed term.\textsuperscript{44} In addition to full concession contracts, there are also partial concession contracts, which are defined by the specific duties transferred to the private entity.\textsuperscript{45} In full or partial concession arrangements, the government maintains control over the service provision through monitoring and regulations, and at the conclusion of the fixed term, the private contractor must return the assets to the government in good condition.\textsuperscript{46} Concessions diminish the need for more intrusive forms of regulation while ensuring that prices do not reach exorbitant levels.\textsuperscript{47} As an additional advantage, the responsibil-

\textsuperscript{36} Id. at 228-229.
\textsuperscript{37} Id. at 229-232.
\textsuperscript{39} Miller, supra note 6, at 229.
\textsuperscript{40} Id.
\textsuperscript{42} Id.
\textsuperscript{43} Miller, supra note 6, at 230.
\textsuperscript{44} GLEICK, ET. AL., supra note 38, at 27-28.
\textsuperscript{45} Miller, supra note 6, at 230.
\textsuperscript{46} Id.
\textsuperscript{47} Id.
ity for operations, maintenance, and investments remain with a single contractor. However, success can be difficult to achieve because both full and partial concessions require clearly defined responsibilities, risks, and a comprehensive regulatory scheme.

The third form of privatization is the split ownership model, in which private and public shareholders split ownership of water systems in a corporate utility. Such organizations generally have a corporate structure managed by a board of directors. Usually the public sector retains the majority of the ownership usually due to local legal restrictions on private ownership. This model of privatization is beneficial because it reconciles two potentially conflicting goals of water supply, the public's goals of affordability, water quality, equity of access, and expansion of service which offset the private owners' goals to maximize profits and recuperate costs.

The fourth form of privatization, divestitures, is the most extreme and least used option. Under this approach, a government sells ownership and operations of the water system to a private company. Common forms of divestiture can include selling shares of the utility, selling physical assets, opening a government-owned company to private investment, and offering management or employee buy-outs. Divestitures can generate substantial improvements in efficiency and increase national income; however, regulation of water quality and other public protections may not be available under this model, leaving its use appropriate only in markets with significant unmet demands.

2. Benefits and Drawbacks of Water Privatization

Nearly all technical studies of Latin American privatization of utilities conclude that it improves performance, profits, efficiency, and output. In addition to the potential benefits of increased efficiency and reduced corruption, one study found that conditionality privatiza-

48. Id.
49. GLEICK, ET. AL., supra note 38, at 27-28.
50. Id. at 28
51. Id.
52. Id.
53. Id.
54. Miller, supra note 6, at 231.
55. Id.
56. Id.
57. Id.
58. Nellis, supra note 8.
tion has important ancillary economic benefits not commonly cited. The value of privatized assets in IMF debtor countries increase as measured by investor willingness to pay more for those privatized assets because investors see adoption of pro-privatization policies as “a signal of credible policy reform.” This overall increased willingness to invest by private parties creates more capital that is very beneficial to these developing countries.

Privatization also provides incentives for countries and their private partners to redistribute and conserve water resources and promotes efficiency in water and sanitation distribution. Moreover, privatization provides a solution to many of the common problems of developing countries in providing access to utilities, such as inadequate financing in the operations of public services and political manipulation of state-owned utilities. Many critics of water utility privatization concede that for developing countries, private capital is required because the governments lack the financial resources to invest and expand water utilities. Essentially these investments are needed because municipal water systems in developing countries lack the funds to extend piping and connections.

There are numerous drawbacks of water privatization. The most obvious and widespread criticism of privatization of water is that privatization of the water supply inevitably results in steep increases in utility prices. Rate increases may make water unaffordable to the poor, some neighborhoods and groups can lose access to water, and profits from the system will inevitably leave the community. When water is not affordable, the poor forego the expensive and safe access to water in exchange for the less safe and cheaper alternatives. The alternatives have ancillary disastrous effects, including poor sanitation and hygiene, and the spread of water-borne illness. In addition, once

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60. Id.
61. Id.
62. Miller, supra note 6, at 229.
63. Id.
65. Id.
67. Link, supra note 7, at 383.
68. Finnegan, supra note 9.
a government privatizes its water system, withdrawing from the deal is difficult and can subject the government to complicated international litigation or arbitration.\textsuperscript{70} The most notable instance in which a private company demonstrated this downside of water privatization was the water wars of Cochabamba, Bolivia at the turn of the century as a result of the World Bank's involvement.\textsuperscript{71}

II. WORLD BANK POLICY AND PROCEDURES

A. History of the World Bank

The World Bank has a history of participating in the privatization of water in numerous developing countries around the world, although that was not the original purpose of the World Bank.\textsuperscript{72} The World Bank was established in 1944 at the Bretton Woods Conference in New Hampshire, which aimed to stabilize the international financial order after World War II.\textsuperscript{73} The Bank's original purpose was to focus on rebuilding Europe; however, following the implementation of the United States Marshall Plan, the World Bank shifted its focus from reconstruction to project-based lending.\textsuperscript{74}

The World Bank is the largest multilateral development organization in the world.\textsuperscript{75} The World Bank supports approximately $20 billion in projects and leverages an additional $50 billion from other institutions each year.\textsuperscript{76} The Bank's influence is widespread especially by "coordinating donors, mobilizing bilateral and increasingly private-sector financing, conducting policy research, and providing technical assistance to borrowing countries."\textsuperscript{77}

The World Bank's involvement in the privatization of Cochabamba's water systems was not an isolated event. It was a publicized example of what the World Bank does all around the world. There currently is a high demand for World Bank engagement in water projects, with lending for water projects accounting for about 16 percent of all

\textsuperscript{70} Id.
\textsuperscript{73} KRAVCHENKO & BONINE, supra note 4, at 445.
\textsuperscript{74} Id.
\textsuperscript{75} Hunter Et Al., supra note 12, at 229.
\textsuperscript{76} Id.
\textsuperscript{77} Id.
World Bank lending from 1994-2004.\textsuperscript{78} From the World Bank's point of view, "water resources management and development are central to sustainable growth and poverty reduction and therefore [are] of central importance to the mission of the World Bank."\textsuperscript{79} Between 1990 and November 2002, out of 276 loans labeled "water supply" awarded by the World Bank, at least 84 of the projects required the debtor country to privatize its water operations in some way before it received its funds.\textsuperscript{80} Besides Bolivia, countries where the World Bank has a history of privatizing water include Tanzania, Armenia, Zambia and India.\textsuperscript{81} In each of these countries, privatization resulted in substantially higher water prices for consumers.\textsuperscript{82}

\textbf{B. World Bank's Involvement in Bolivia's Access to Water}

In the 1990s, Bolivia had privatized most of its publicly owned utilities; however, water was one of the few remaining utilities the Bolivian government had not yet privatized.\textsuperscript{83} The World Bank took notice and had an interest in the municipal water systems of the country's three largest cities – La Paz, Santa Cruz, and Cochabamba.\textsuperscript{84} According to the World Bank's Senior Water Advisor, John Briscoe, the systems of La Paz and Cochabamba, which were both run as public utilities, failed to adequately meet the needs of the cities they served and that in Cochabamba there was "no credible provider," and that privatization had to be an option to consider.\textsuperscript{85} At the time, the Bolivian government was considering two options for increasing the supply of water to Cochabamba: the Misicuni Multipurpose Project, which was a giant dam building project; and the Corani Tunnel Project, which involved the construction of a tunnel to transport water to the city.\textsuperscript{86} The World Bank considered the proposed Minicuni Dam project not feasible

\begin{itemize}
\item \textsuperscript{79} Id. at 10.
\item \textsuperscript{81} Bretton Woods Project, supra note 72.
\item \textsuperscript{82} Id.
\item \textsuperscript{83} Maria McFarland Sanchez-Moreno & Tracy Higgins, No Recourse: Transnational Corporations and the Protection of Economic, Social, and Cultural Rights in Bolivia, 27 Fordham Int'l L. J. 1663, 1748 (2004).
\item \textsuperscript{84} Id.
\item \textsuperscript{85} Id. at 1748-1749.
\item \textsuperscript{86} Id. at 1749.
\end{itemize}
due to its high cost and advised Bolivia not to pursue the project. The Bank stated that any project involving the dam or tunnel would require private investment. The Bolivian government wanted to move forward with the dam project and sought private investors.

The World Bank pushed for water privatization in the city, issuing a report in June 1999, and even went as far as urging "no public subsidies be given to hold down the price of water." According to the World Bank, "privatization would bring market discipline and efficiency, as well as much needed foreign capital to expand the SEMAPA network to underserved segments of the population." John Briscoe concisely stated the World Bank's position in noting, "if you are genuinely concerned with [people] getting water, what is the best route to do that? . . . [We've] had decades of [public water management], and it hasn't worked. It's a . . . simple reality that it hasn't worked." The World Bank had good intentions in its desire to privatize Bolivia's water utilities, with the hopes of expanding access to water and sewage treatment to the rural and poor in Bolivia. As will be described, however, that was not the result.

C. World Bank's Framework Encouraging Privatization

If there is a fundamental human right to water, how then does the World Bank privatize a country's water supply? The World Bank has influence in governmental action and uses conditions to providing financial assistance. Specifically, the World Bank often requires countries to accept "structural adjustment," which includes opening markets to foreign companies and privatizing state enterprises, including water systems. In terms of water, the World Bank's view is that it is reluctant to "lend to a country that appears to be mismanaging its water system – by neglecting needed investments, failing to run effi-

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89. Id.
91. Finnegan, supra note 9.
92. O'Neill, supra note 90, at 364.
93. Finnegan, supra note 9.
94. Id.
cient systems, and drowning in corruption." The World Bank will often use conditional lending to finance multinational corporations instead of encouraging efficient public enterprises to run developing nations' water utilities to reduce national debt.

Water rights and policy are left to the determination of each sovereign state where "the water is distributed as the development of water resources management policy, as with all government policy, is the sovereign function of national states." The World Bank provides assistance to struggling nations; however, the assistance, support, and capital come with strings attached. One major instrument that the World Bank has at its disposal to encourage a particular set of policy goals is conditional lending. Conditional lending by the World Bank is defined as a set of conditions that must be satisfied for the Bank to make disbursements in a development policy operation. Sometimes the conditioned terms are simply triggers and benchmarks, but they can also include an element of mandatory privatization.

The World Bank has three different categories of loan conditions with corresponding degrees of leveraging power. The three types of agreements in descending order of private controls are concession agreements, lease agreements, and management contracts. Under a concession agreement, a private company is awarded the rights and responsibilities for everything from setting customer price structures and labor to decisions regarding the expansion of the infrastructure. These contracts usually have longer durations than the other types of agreements and at termination, control over the assets remain with the private company. Next, under a lease agreement, the private company receives its revenues from customer fees and has control over both the price structure and labor; however, these can be shorter in duration than concession agreements, may or may not in-

96. Id.
97. Link, supra note 7, at 381.
98. Id. at 382.
99. Id.
101. Id. at 16.
102. Link, supra note 7, at 384.
103. Id.
104. Id.
105. Id.
clude infrastructure development, and usually specify which assets revert to the state at termination. Finally, under a management agreement, the private company receives a set fee for managing the distribution system but control of all fees, rates, and assets remains with the state.

In addition to the three types of conditional lending contracts, the World Bank also maintains policies discouraging government subsidies and encouraging a plan of full cost recovery. For the World Bank, "full cost recovery implies that the water consumers should cover the cost of operating, maintaining, and expanding the water utility as needed." The World Bank's full recovery requirements tend to prohibit developing governments from subsidizing any part of the cost of services, while private companies can charge customers for infrastructure improvements that may not be made for years. "There is some sensitivity as to whether under a privatized system full cost recovery includes a reasonable rate of return on investment for the participating private company, but it seems private companies do include this reasonable profit margin in their recovery figures." "As part of its pure full cost recovery goal, the World Bank also discourages government subsidization of the water systems."

III. BOLIVIA'S STRUGGLE WITH WATER RIGHTS

A. History of Bolivia's Water Rights

Bolivia's history with water begins with its democratically elected government being overthrown by an army coup d'etat in 1964. What followed were years of military dictatorships, which resulted in government corruption and hyper inflation. Since 1985, following the return of the government to the people, the country has been financially dependent on the World Bank. The World Bank has

106. Id.
107. Id.
108. Id.
109. Id.
110. Naegele, supra note 95, at 109.
111. Link, supra note 7, at 384.
112. Id.
113. Finnegan, supra note 9.
114. Id.
been willing to loan money to Bolivia with conditions, such as privatizing public assets, under the assumption that where the government had failed because of widespread corruption, the private market would succeed.\textsuperscript{116} The leaders of Bolivia followed the directions of the World Bank and began to sell off national assets such as the airlines, utilities, mines, and railroads to private companies. At the same time, they tried to eradicate the illegal drug trade of coca leaves, which at the time represented 3\% of Bolivia's GDP and 18\% of its exports.\textsuperscript{117} This transition period resulted in an increase in Bolivia's dependence on international financial institutions, particularly the World Bank.\textsuperscript{118}

1. The Nationalized Era

The need to improve water services in Bolivia was urgent, and the government was ill-equipped to address the problem.\textsuperscript{119} The World Bank was involved in financing three water projects in Bolivia in the 1980s and 1990s.\textsuperscript{120} The government of Bolivia subsequently approached the World Bank seeking a more ambitious water supply and sanitation program, which the Bank approved of in the Major Cities Water Supply and Sewerage Rehabilitation Project, worth 35 million U.S. dollars.\textsuperscript{121}

Prior to privatization, Bolivia had "achieved major progress in improving access to piped water supply and sanitation between 1992 and 1997."\textsuperscript{122} "Even with these advances, the water supply reached only seventy-two percent of Bolivians as of 1997."\textsuperscript{123} In fact, by the late 1990s, about 400,000 people in Cochabamba, Bolivia's third largest

\textsuperscript{116} Id.
\textsuperscript{117} Id.
\textsuperscript{118} Id.
\textsuperscript{123} Id.
city, were not connected to the city’s water system and most were paying exorbitant prices for water delivered by trucks.\textsuperscript{124} Cochabamba’s water problems had worsened since the 1970s as hundreds of thousands moved into the city from rural areas and smaller towns.\textsuperscript{125} The water system had been overburdened and the water table beneath the city was rapidly dropping.\textsuperscript{126} Bolivia could not afford to provide needed improvements in its water service.\textsuperscript{127}

Even if it could have afforded improvements, the government water agency was “notoriously plagued with acts of corruption.”\textsuperscript{128} Many of Cochabamba’s neighborhoods were never hooked up to the water system, so locals tried to take matter into their own hands in the 1990s.\textsuperscript{129} The residents of San Miguel, a neighborhood in Cochabamba, fed up with the lack of access to water, dug their own well.\textsuperscript{130} The neighborhood built it by working together, and as the residents of San Miguel saw it, they worked as a group to build it, so it belonged to all of them, a total of 240 families.\textsuperscript{131} This example of lack of access to the water system was systemic across Cochabamba, and even if parts of the city were hooked up to the network, the water service was always inconsistent.\textsuperscript{132} The government wanted to expand the city’s water network, but could not afford to do so.

In the World Bank’s view, Cochabamba was a city screaming for privatization of its water supply.\textsuperscript{133} To achieve its goals of expanding infrastructure and access to the water systems, the World Bank conditioned the extension of the closing date of the 1990 loan on the implementation of the privatization of the Cochabamba water utility, SEMAPA.\textsuperscript{134} Consequently, Bolivia began soliciting bids in 1998 to privatize its water and sewage services in Cochabamba.\textsuperscript{135}

\textsuperscript{124} NOW, supra note 115.
\textsuperscript{125} Id.
\textsuperscript{126} Id.
\textsuperscript{127} Norris & Metzidakis, supra note 119, at 34-5.
\textsuperscript{128} Id. at 35.
\textsuperscript{129} NOW, supra note 115.
\textsuperscript{130} Id.
\textsuperscript{131} Id.
\textsuperscript{132} Id.
\textsuperscript{133} Finnegan, supra note 9.
\textsuperscript{134} Implementation, supra note 87.
\textsuperscript{135} Aguas del Tunari v. Republic of Bolivia, 20 ICSID REV. FOREIGN INVESTMENT L. J. 450, 468 (2005) [hereinafter Aguas].
2. Negotiation and Privatization of Bolivia's Water Rights

When the government of Bolivia put the city's water up for auction, only one bidder appeared, a company created solely for the purpose called Aguas del Tunari.\textsuperscript{136} Aguas del Tunari made the only bid in April 1999 and it fell short of complying with the requirements of the tender process.\textsuperscript{137} Nonetheless, the company then entered into concession negotiations with Bolivian representatives, who were part of a negotiation committee formed by government decree.\textsuperscript{138} For Aguas del Tunari, the situation presented a profitable opportunity to improve delivery of desperately needed water to consumers in Bolivia.\textsuperscript{139} However, it appeared as if Aguas del Tunari had not given much thought to how its plans would be received in Cochabamba.\textsuperscript{140} The company's representatives on the ground included "engineers, not marketers . . . newly arrived from abroad," who were arguably "not attuned to the problems or passions of the Bolivian public."\textsuperscript{141}

Aguas del Tunari seemed surprised when some alarmed citizens raised concerns about the transparency of the negotiation process.\textsuperscript{142} While Bolivian citizens were generally aware that the government was in a negotiation process to sell off its water system in Cochabamba, they "sought more specific information concerning that process."\textsuperscript{143} In fact, a newspaper article dated September 3, 1999, complained about the apparent secrecy of the negotiation process and requested that the Bolivian government "publicize the true rates that would govern before it concluded the Concession."\textsuperscript{144}

Unknown to those desiring more information about the contract negotiation, the Bolivian government had already approved the text of the contract the day before, on September 2, 1999.\textsuperscript{145} On September 3, 1999, the same day the newspaper article argued for more transparency in the ongoing negotiation process, the Concession contract negotiations were concluded and signed by representatives of Aguas del Tunari and the Bolivian government.\textsuperscript{146} The Concession contract,

\textsuperscript{136} NOW, supra note 116.
\textsuperscript{137} Aguas, supra note 136.
\textsuperscript{138} Id.
\textsuperscript{139} Id.
\textsuperscript{140} Finnegan, supra note 9.
\textsuperscript{141} Id.
\textsuperscript{142} Norris & Metzidakis, supra note 120, at 35.
\textsuperscript{143} Id.
\textsuperscript{144} Id.
\textsuperscript{145} Id.
\textsuperscript{146} Aguas, supra note 136, at 468-469.
signed without the public’s awareness, reflected the lack of competition for the contract by granting Aguas del Tunari a $2.5 billion, forty-year “relationship” with the Bolivian Water and Electricity Superintendencies. Aguas del Tunari would take over the municipal water network and all the smaller systems in the metropolitan area, and would have exclusive rights to all the water in the district, even in the aquifer. The contract also required Aguas del Tunari to provide a regulated amount of water, of a certain quality, for Cochabamba in exchange for a negotiated sixteen percent return on its investment. The rate of return “would be adjusted annually to the consumer price index in the United States.”

Once the final contract’s existence became known to the public, reaction to the contract was immediate and unfavorable. The Bolivian government later admitted that “[i]n fairness, no one negotiating the Concession agreement could have anticipated the intensely hostile reaction that greeted [Aguas del Tunari] immediately upon the Agreement’s signing.” The outrage over the contract and the way it was negotiated, and the anger towards Aguas del Tunari, continued to grow in the ensuing months, especially when it was discovered that the majority shareholder in Aguas del Tunari was Bechtel, a multinational conglomerate. As per the concession contract, the water concession itself would take effect on November 1, 1999.

B. Cochabamba’s “Water Wars”

1. The Concession Takes Effect

The protests initially only sought a decrease in water rates, but anger started to mount when it became known that not only was Aguas del Tunari going to raise rates, but also was not going to expand service to the impoverished southern part of the city where the company had no profits to gain from an expensive expansion. Two months after taking over the Cochabamba water system, Aguas del Tunari did

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147. Finnegan, supra note 9.
148. Id.
149. Aguas, supra note 136, at 468-469.
150. Finnegan, supra note 9.
151. Norris & Metzidakis, supra note 120, at 36.
152. Aguas, supra note 136, at 472.
153. Norris & Metzidakis, supra note 120, at 36.
154. Aguas, supra note 136, at 472.
the inevitable and raised water rates by as much as 200 percent.156 People making eighty dollars a month were being asked to pay twenty dollars a month just for water.157

Prior to taking over Cochabamba, the city’s water system had been operating at a loss of more than $2.25 million a year for the past six years, with debts in excess of $35 million.158 Aguas del Tunari rationalized the rate increase by saying that the rates had to be increased to where they covered at least the costs incurred in operation.159 Not only were the rates going up, but Aguas del Tunari had the authority to start charging people for water it did not even provide, including the water from privately dug wells like the one in San Miguel previously mentioned.160 In fact, for cooperative wells like San Miguel’s community well, which the government had not helped build, Aguas del Tunari could go in and install meters and begin charging for the water extracted from the well, in addition to charging the residents for the installation of the meter.161

2. The Water Wars

The ultimate response to privatization was a popular uprising in Cochabamba, lasting from February to March 2000.162 With the rates soaring, people in Cochabamba felt Aguas del Tunari was not merely covering its costs; they felt as if the company was gouging them.163 There were street protests and a broad coalition emerged of neighborhood associations, water cooperatives, labor unions, engineers, environmentalists and peasant farmers, called the Coordinator for the Defense of Water and Life (La Coordinadora) led by Oscar Olivera, a machinist from a shoe factory.164 The poor of Cochabamba called Aguas del Tunari’s actions as trying to “lease the rain.”165 Thousands of people took to the city’s streets to protest the privatization of their water that included the communities’ coopera-
tively managed domestic water systems and family wells.\textsuperscript{166} Aguas del Tunari executives in Cochabamba did not have any plans on how their actions would be received, especially since most were foreign engineers, not marketers, having literally just arrived in the country and were not attuned to the pulse of the Bolivian people.\textsuperscript{167} In fact, the company's manager, Geoffrey Thorpe, stated in an indifferent manner that if the people did not pay their water bills, then their water would be turned off.\textsuperscript{168}

In February 2000, the protests and the "water war" began in earnest.\textsuperscript{169} People that were unlikely to participate in protests, let alone become violent, did so during these protests.\textsuperscript{170} Everyone from housewives to street children were out protesting Aguas del Tunari, with the crowds so outraged they began throwing stones at the police.\textsuperscript{171} The government of Bolivia's response was to send a ministerial delegation to Cochabamba.\textsuperscript{172} By the end of February, although the water price hikes had been rolled back, the protests continued.\textsuperscript{173}

Fearing the demonstrations would threaten future foreign investment in Bolivia, the government of Bolivia decided to take further action to stop the demonstrations.\textsuperscript{174} The government sent in troops to break up the protests and nearly 200 protesters were arrested, with seventy civilians and fifty-one policemen wounded from the clashes.\textsuperscript{175} By April 2000, the protesters once again occupied the Cochabamba central plaza.\textsuperscript{176} When La Coordinadora's leaders, including Oscar Olivera, arrived at the Governor's office for a meeting, they were arrested.\textsuperscript{177}

This situation resulted in a nationwide protest and a declaration of a national state of siege on April 8, 2000, essentially declaring a state of martial law allowing for mass arrests and the use of force.\textsuperscript{178} The day the state of siege was declared, the Bolivian Army fired tear gas into the protestors in Cochabamba and cut off power to local radio

\textsuperscript{166} NOW, supra note 116.
\textsuperscript{167} Finnegan, supra note 9.
\textsuperscript{168} Id.
\textsuperscript{169} Id.
\textsuperscript{170} NOW, supra note 116.
\textsuperscript{171} Id.
\textsuperscript{172} Finnegan, supra note 9.
\textsuperscript{173} Id.
\textsuperscript{174} NOW, supra note 116.
\textsuperscript{175} Finnegan, supra note 9.
\textsuperscript{176} Id.
\textsuperscript{177} Id.
\textsuperscript{178} Id.
and television stations. The "water war" turned deadly when an army sharpshooter in civilian clothes fired into a crowd of unarmed protesters killing a seventeen year old student. It was at this point that it became clear that there was "no future for Aguas del Tunari in Cochabamba." The company's executives were told that the police could no longer guarantee their safety, and they fled Cochabamba and Bolivia as soon as they could. The next day the government of Bolivia informed Aguas del Tunari that because they had "abandoned" its concessions, the contract was revoked.

3. Result of the Water Wars

President Hugo Banzer announced on April 11, 2000 that the privatization law had been revised. Following the revocation of the Privatization law, SEMAPA resumed providing water and sanitation services and the contract with Aguas del Tunari was cancelled.

After the "water wars" of 2000, the Bolivian government turned to international non-governmental organizations (NGOs) instead of the World Bank for advice on how to restructure its water resource management systems. The International Development Research Centre (IDRC), for example, supported a research project organized by the Commission for Integrated Water Resource Management. Input was collected from irrigation councils and farmers to help determine the most efficient approaches to water resource management. The Bolivian government employed the project results in drafting a new irrigation law. Because it was designed using input from the public, it gained widespread acceptance, the importance of which should not be underestimated, given the levels of activism concerning resource management in Bolivia today.
C. Bolivia’s Constitution

1. The New Constitution’s Explicit Fundamental Right to Water

Evo Morales was elected largely due to the public outcry over the failure of the privatizations of both Bolivia’s water and natural gas systems. President Morales recognized and identified with the population’s concerns, and on January 3, 2007 stated “water cannot be turned over to private business... it must remain a basic service, with participation of the State so that water can be provided almost for free.” The fundamental right to water has been the framing dialogue for water politics in Bolivia since the presidential election in 2006. The drive for a fundamental right to water in Bolivia came from social organizations that lobbied heavily for the creation of the Ministry for the Environment and Water, and continued during the Constituent Assembly meetings of 2006-2007. Various social organizations in Bolivia then presented numerous proposals and discussed what responsibilities the government of Bolivia should have around water and its management. Water was prioritized for consumption and production in these meetings. These discussions culminated in the addition of the right to water in the new Bolivian constitution. The constitution prominently declared that, “Everyone has the right to water and food.”

The ratified new Bolivian Constitution of 2008 not only mentions the water wars in its preamble, but outlines the fundamental right to water in the following pronouncements with respect to water:

- Water is a fundamental right for life (Articles 16, 20, 373, 374)
- The protection of water sources against contamination (Articles 274, 376)
- Respect for traditional uses and customs around water (Articles 374, 375)

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194. Id.
195. Id.
196. Id.
• The elimination of water concessions and prohibition of the privatization of water services (Articles 20, 373)
• Regulation and management of water resources with social participation (Article 374)
• Protection of water sources from free trade agreements (Article 377).198

Bolivia has also outlined a plan of commitment to improve access to water outlined in Bolivia’s National Plan for Development 2006-2010, and more explicitly in the National Plan for Basic Sanitation 2008-2015, which outlines a target to ensure that 90% of the country has access to water by 2015.199 These policies state goals, but do not explain how they will achieve them, especially when many Bolivians are living with water shortages and droughts.200

2. Bolivia’s Current Precarious Position

The reality is that small community groups are still largely managing water, such as in San Miguel, or private groups are selling access to water in rural and poor regions of Bolivia.201 In the rapidly expanding southern part of Cochabamba, coincidentally the most impoverished part of the city, the public sector provider, SEMAPA, still does not operate.202 Community-led associations, water committees, and private water vendors continue to serve the majority of the region with limited financial resources and supplies, while communities continue to wait for the long-promised water from the Misicuni Dam project to arrive.203

While the Bolivian Constitution explicitly states “[i]t is the responsibility of the state, at all levels of government” to “provide access to water and sanitation,”204 in the south of the city, the government has yet to demonstrate sufficient capacity, nor has it sufficiently invested to be able to engage, or regulate the largely independent water providers.205 Bolivia has created a system of licenses that has given community-managed systems the right to use specific water sources; however, many of the subterranean sources on which these licensees rely are not adequate for human consumption because they are salty or

198. Id.; Bustamante, supra note 193.
199. Bustamante, supra note 193.
200. Id.
201. Id.
202. Id at 233.
203. Id.
204. Const. Bolivia Ch. II, Art 20(2).
205. Bustamante, supra note 193, at 233.
contaminated.206 Many of the community committees that control local water rights are fiercely independent and are not willing to let the state take control of their water sources.207 Instead, they are looking for financial, technical, or organizational support to improve access to, and ensure their people receive, quality water.208 For all of these reasons, numerous local groups continue to feel abandoned by the state and the policies that have emerged from the water wars.209

Wholly private or wholly governmental control over access to safe water may work for some cultures and countries; however, such complete top-down or bottom-up models will likely not be successful in reforming a developing country, especially without considering the ancillary costs associated with adopting such legal reforms.210 While the Bolivian government has recognized “the population’s cultural values and desire for the water to be in the public’s hands, it may be at the expense of realizing the right to water.”211 Developing the infrastructure, including water pipelines, the Misicuni dam, and related projects to fulfill the state’s responsibility to provide basic amounts of safe water to every person of Bolivia will be a very expensive endeavor.212

The Bolivian government has put itself in a precarious position by prohibiting all private investment in water infrastructure, while at the same time promising the population a basic level of water to fulfill its recognition of water as a human right.213 The government has neither ideas nor any model for how the new regime is going to provide nearly free water.214 And even if investment were encouraged, the “experience of strong democratic social mobilization turning violent has fostered an uninviting environment in which foreign entities are unwilling to invest the much needed capital.”215 Foreign capital is simply required to improve the water infrastructure.216 If the infrastructure cannot be put into place to provide water to the people, then the new constitution and the government of Bolivia risk loss of faith in both the

206. Id.
207. Id.
208. Id.
209. Id.
210. Id.
211. Id. at 190-191.
212. Id. at 191.
213. Id.
214. Id.
215. Id.
216. Id.
security of fundamental rights and the legitimacy of the
government.\textsuperscript{217}

With the Bolivian government not following through on its consti-
tutional promise to provide basic water services, most communities
feel neglected.\textsuperscript{218} In Cochabamba, service from SEMAPA has not im-
proved since the new constitution has gone into effect, as coverage
rates remain below 50\%, and those who receive water experience only
intermittent service with continually high prices.\textsuperscript{219} The government's
failure is widely considered "a direct result of the constitutional prohi-
bition of private investment in water services, which has resulted in
insufficient investment necessary for improved infrastructure and low
cost distribution in Bolivia's water system."\textsuperscript{220} Consequently, even
though the Bolivian constitution now expressly provides for the human
right to water for citizens, these communities have still had to build
their own water systems with wells managed locally in a cooperative
manner.\textsuperscript{221}

IV. POSSIBLE SOLUTION FOR BOLIVIA THROUGH A PUBLIC-
PRIVATE PARTNERSHIP

A. The Rural Electrification Administration

1. What is the Rural Electrification Administration?

During the Great Depression, rural communities lacked electri-
city because for-profit electric companies believed that constructing
power lines to potential customers in rural areas was unprofitable, and
therefore, not reasonable.\textsuperscript{222} By the 1930s, almost 90\% of the urban
inhabitants had electricity, whereas only 10\% of rural residents had
electricity.\textsuperscript{223} There was a market failure in providing access to electric
power to the rural residents.\textsuperscript{224} The private utility companies, who
supplied electric power to most of the nation's consumers, argued that
it was too expensive to string electric power lines to isolated rural
farmsteads and that nearly all farmers were too poor to afford electric-

\textsuperscript{217} Id.
\textsuperscript{218} Id.
\textsuperscript{219} Id.
\textsuperscript{220} Id.
\textsuperscript{221} Id.
\textsuperscript{222} Kornfeld, supra note 64, at 720.
\textsuperscript{224} Id.
The Roosevelt Administration considered this a major problem, and thought that the country could do better.

In 1935, the Rural Electrification Administration (REA), one of the many New Deal programs, was established to bring electricity to rural areas of the United States, specifically areas like the Tennessee Valley, where utility companies would not provide access to electricity. The head of the REA, Morris Cooke, in 1935 stated:

In addition to paying for the energy he used, the farmer was expected to advance to the power company most or all of the costs of construction. Since utility company ideas as to what constituted sound rural lines have been rather fancy, such costs were prohibitive for most farmers.

Like private water consortiums, such as Aguas del Tunari, the electric utilities falsely believed that it would be cost prohibitive to expand access to those who do not have access because of the short sightedness of their profit motives. President Roosevelt’s foresight that electricity was a modern necessity mandated that if the private market would not act, then the federal government would step in and provide loans to the rural residents so that the utility companies would be able to construct access to the power grid. Under the REA, rural residents were loaned money from the federal government to create cooperatives in which they would construct electric utilities and manage them to all members of the rural community. The government gave the residents the tools to create and self manage their utility needs.

2. Success of the Rural Electrification Administration

“Even as late as July 1935, a group of utility company executives wrote a report in which they claimed that, in light of their earlier extensive research, ‘there are very few farms requiring electricity for major farm operations that are not now served.’” This statement would eventually come to haunt the for-profit electric industry when the REA and the rural electric cooperatives, of which there are more than 900 today, confirmed the falsity of the view that most farms requiring electricity were being served. Rural electrification was
rooted in the conviction that an affordable supply of electricity would improve the standard of living and the economic viability of rural communities.\textsuperscript{231}

As the number of rural households with electricity increased, an interesting phenomenon took place—the rural communities required more energy than urban communities.\textsuperscript{232} As soon as these farmers were connected to the electric grid, they began purchasing refrigerators, stoves, and countless other electrical appliances.\textsuperscript{233} These sales began to spur local economies by improving business and, as demand grew for more electricity, the added need defrayed the cost of constructing power lines across the countryside.\textsuperscript{234} Over the next few decades, the number of rural cooperatives doubled and the number of consumers tripled.\textsuperscript{235} Consequently, the number of rural consumers who were connected to and served by the rural electric system grew at an exponential rate.\textsuperscript{236} By 1953, over 90\% of the farms across the United States were connected; today that number has increased to above 99\%.\textsuperscript{237} In fewer than 20 years, the number of those without access to electricity dropped 90\% to 10\%, largely because of the REA and its system of loaning money to rural communities to create cooperatives.

The REA was different from nearly every other New Deal program “in that it did not involve much federal spending beyond the wages of its staff.” Instead, it was a loan program in which REA would extend low-interest loans and staff experts to cooperatives created by rural people who wanted electricity.\textsuperscript{238} And even after the disappearance of the background framework of the REA, cooperatives all across the nation are still producing electricity.\textsuperscript{239} In addition, since its inception 77 years ago, the default rate on funds loaned by the federal government to these cooperatives has been negligible, less than one percent.\textsuperscript{240}

\begin{itemize}
\item \textsuperscript{231} Kornfeld, \textit{supra} note 64, at 722.
\item \textsuperscript{232} \textit{Rural, supra} note 224.
\item \textsuperscript{233} \textit{Id.}
\item \textsuperscript{234} \textit{Id.}
\item \textsuperscript{235} Kornfeld, \textit{supra} note 64, at 724.
\item \textsuperscript{236} \textit{Id.}
\item \textsuperscript{237} \textit{Id.}
\item \textsuperscript{238} \textit{Id.}
\item \textsuperscript{239} \textit{Id.}
\item \textsuperscript{240} \textit{Id.}
\end{itemize}
B. Micro-loans

One of the most successful methods of gathering and providing private capital that could be used to help expand access to water in developing countries is micro-loans. Micro-loans are part of a system of micro-finance which refers to the provision of a broad range of financial services such as deposits, loans, payment services, money transfers and insurance to poor and low-income households and their micro-enterprises. This system of micro-lending was created by Muhammad Yunus, a Bangladeshi economist and owner of the Grameen Bank in the late 1970s. Yunus went on to win the Nobel Peace Prize in 2006 for the wild success of his revolutionary micro-loan system. Micro-loans are generally small and restricted to the amount borrowers can repay from their savings, rather than from profits on their business investments. Repayment is usually spread out over a period of time ranging from several months to a year and interest rates for the loans are often high, for example Grameen Bank charges borrowers rates of up to 20%. Although such rates are higher than those charged by traditional banks, they are often lower than other alternatives available to the poor in the developing world, if such alternatives are available. Despite these high interest rates, micro-lending institutions enjoy high repayment rates, usually above 95% rate of repayment.

How is it that the repayment rate is so high when these loans are made to the desperately poor? Repayment is driven by social pressure, a peer pressure-based system of lending, and that replaces a system of collateral-based lending. Mr. Yunus’s Grameen system works in the following manner. When borrowers seek a loan, they are required to establish a group of five other borrowers from their neighborhood or join a group of such borrowers, and agree to meet with these...
other borrowers on a weekly basis.\textsuperscript{249} Members can only apply for future loans once the group resolves its outstanding debt, and since the group of borrowers is in on this loan together, the system encourages social responsibility to repay.\textsuperscript{250} Interestingly, micro-loans have an even higher rate of return when the borrowers also receive some form of business education along with the initial loan.\textsuperscript{251}

C. Application of REA and Micro-loans to a Workable World Bank Loan Program to Bolivia

The World Bank has acknowledged that privatization of water rights in Bolivia is not the answer.\textsuperscript{252} The World Bank’s Operations Evaluation Department has stated:

Privatization is not a panacea. A pragmatic approach tailored to local circumstances should be adopted for effective institutional development. Privatization does not insulate a utility from the consequences of poor project selection, political interference, weak management or lack of community support. The Bolivia experience demonstrates that cooperative solutions can be superior to either public or private approaches to utility management.\textsuperscript{253}

The World Bank itself acknowledges that the concession agreement with Bolivia to privatize its water rights to private companies is not the answer, but that the answer is really a bottom up, public-private cooperative model.

The solution to Bolivia’s water problems might be in the form of a direct loan to the people of Bolivia similar to that of the REA. The World Bank could make direct loans to regional cooperatives that have the sole purpose to create access to water for a local community. The incentive for the World Bank to make such a risky loan would be to borrow from the Micro-loan scheme of Grameen Bank, of using a system of peer pressure as an alternative to collateral, while making loans with a higher than average interest rate and setting three conditions for receiving the loans.

\textsuperscript{249} Kornfeld, \textit{supra} note 64, at 728.
\textsuperscript{250} Lovgren, \textit{supra} note 243.
\textsuperscript{253} \textit{Id.}
First, require the recipient of the loans to create a board of neighbors to oversee the creation of either a well or expansion of pipes to connect a village to other villages' water systems. This requirement would establish a system of peer pressure on the recipient of the loan to ensure that the loan is repaid. It would also allow for the first step towards creation of an ultimate cooperative board, just like the REA, that would oversee the construction of the well and subsequent infrastructure for the particular village. The subsequent maintenance board would ultimately serve as the cooperative water utility for that particular village once the well or pipes have been expanded.

Second, require that the village receive proper education to create the well or expand access to a safe water system. This can be achieved by having a corps of retired and volunteer well drillers that can be assembled to teach members of a particular region how to drill wells.\(^ {254} \) After the local village understands how to drill and construct a well, the village can "pay it forward" to other villages by passing on the knowledge of how to create wells based on the knowledge they received when they built their own well. The incentive for the various tribes and other indigent people to work together would be that the initial group could not have wells drilled in its village until it taught and helped at least one village or other group to drill wells, and have this requirement imposed on each subsequent group.\(^ {255} \)

Third, require that this board receive a minimum level of business education, so that they could understand how to repay the loan. Since each village already has a governance structure, this structure can be employed to gather the repayment funds and decide what type(s) of businesses would best suit the village's members.\(^ {256} \) Once access to water is expanded, more people will use water for a myriad of purposes. The expansion of access should not end with the creation of a well in a village that did not have a well, it should then continue to the addition of faucets and running water to buildings. With higher water consumption, impoverished areas can then begin to develop. Villages can then branch out to provide proper sanitation and educational opportunities for children, as children will no longer be forced to stay home to help retrieve water.\(^ {257} \) The villages would then be able to provide other amenities to villagers, while reducing the spread of waterborne illness, resulting in a situation similar to that of the rural farmers in the REA, thus increasing the standard of living.

\(^ {254} \) Kornfeld, supra note 64, at 730.
\(^ {255} \) Id.
\(^ {256} \) Id.
\(^ {257} \) Id. at 731.
CONCLUSION

Just as breathing air is necessary for life, water is necessary for life. In a perfect world, clean water would be free just like the air; however, we do not live in a perfect world. We live in a world where water is not free. Although the efforts worldwide to enshrine a fundamental human right to water are admirable, such an objective would not be a realistic option in today's global environment. If a fundamental right to water were to be internationally declared, international law would lose legitimacy because it would not be possible to enforce this right. This is not to say that the globe should not pursue this as an ultimate goal one day. However, before international law recognizes this right, the governments of the world should make great effort to provide access to safe and clean water, so that when the right to water is declared a fundamental right, it will be a legitimate and enforceable right.

The World Bank is actively working towards the ultimate goal of providing every person access to clean drinking water, but it cannot privatize every water source in the world, throw money at it, and declare the problem solved. A top-down approach does not work in every situation. The world is much too complex to expect a one-size-fits-all solution to fix everything. The best way to address large scale problems is usually to look at problems in smaller components, and see if there are smaller answers or, in this case, a local solution. Just as every nation has its own cultures and history, problems around the world are just as varied, and to attempt to use the same rigid model to address similar problems may work in isolated cases, but will fail in isolated cases as well. To claim that the government is best or a private company is best to provide access to water in large populations is too limited an answer. The answer will vary based on the local people in the local situation. And in the developing world, the solution generally is a mix of both public and private.

Bolivia is a microcosm of this problem. Publicly owned water utilities failed to provide water access to millions and privately owned water utilities failed as well. In the village of San Miguel in Cochabamba, when the government failed to act, the village acted on its own. Hundreds of thousands of people in Bolivia lack access to water today. Declaring water a fundamental right has done nothing to expand access to those who are still in need. A possible solution would be to build off of historic successes. Just as those who do not pay attention to history are bound to repeat the same mistakes of the past, those who attempt to try what has worked could very well have the same success as their predecessors. The Rural Electrification Administration
through its loan process provided access to electricity to rural America, which resulted in the creation of vast new economies. Applying the REA with a combination of micro-loan practices could generate a possible solution to the problem of access to water in Bolivia and, ultimately, elsewhere in the developing world. Total privatization failed in Cochabamba, and total public ownership failed as well. If this public-private partnership model succeeds, then the world can move towards the declaration of a legitimate and enforceable human right to water.