

University of Mississippi

eGrove

Honors Theses

Honors College (Sally McDonnell Barksdale
Honors College)

2013

Mixed Record: Water Privatization in Latin America

Brianna Nicole Van Stekelenburg

Follow this and additional works at: https://egrove.olemiss.edu/hon_thesis

Recommended Citation

Van Stekelenburg, Brianna Nicole, "Mixed Record: Water Privatization in Latin America" (2013). *Honors Theses*. 2449.

https://egrove.olemiss.edu/hon_thesis/2449

This Undergraduate Thesis is brought to you for free and open access by the Honors College (Sally McDonnell Barksdale Honors College) at eGrove. It has been accepted for inclusion in Honors Theses by an authorized administrator of eGrove. For more information, please contact egrove@olemiss.edu.

Mixed Record: Water Privatization in Latin America

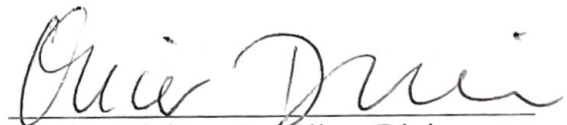
© 2013

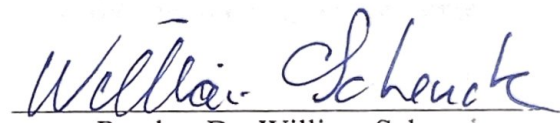
By Brianna Nicole Van Stekelenburg

A thesis presented in partial fulfillment of the requirements for completion
Of the Bachelor of Arts degree in International Studies
Croft Institute for International Studies
Sally McDonnell Barksdale Honors College
The University of Mississippi

University, Mississippi
Spring 2013

Approved:


Advisor: Dr. Oliver Dinius


Reader: Dr. William Schenck


Reader: Dr. Jeffrey Jackson

ABSTRACT

BRIANNA NICOLE VAN STEKELENBURG: *Mixed Record: Water Privatization in Latin America* (Under the direction of Oliver Dinius)

This thesis examines to what extent the Latin American experience suggests privatization is a promising path to deliver a reliable and affordable water supply. In order to address this question, the thesis studies whether water privatization has worked in Latin America by examining three case studies. The countries that are used for the case studies are Bolivia, Chile and Peru. The thesis is made up of five chapters. The first chapter contains general information on water as a human right and an economic good. Each case study is comprised of a chapter and focuses on five main dimensions that serve as the basis for the comparison in the last chapter. The five main dimensions are the demographic profile, the political and economic context, the approach to water privatization, the public response and the ultimate outcome. The thesis reaches a couple of different conclusions in the final chapter, which acts as a comparison chapter. The experience of Chile suggests that in wealthy countries where the majority of the population lives in urban areas, it may be best to privatize the water system to increase coverage and efficiency. The experience of Bolivia suggests that in poor countries, it may be best to keep the water system in public control because the government is able to regulate the price of water. The experience of Peru suggests that in a middle income country, it may be best to turn to partial privatization so that the water system becomes more efficient and better run but also so that the government can regulate the price of water.

Table of Contents

Introduction	1
Chapter One	
Water: A Human Right or a Market-Driven Good?.....	8
Chapter Two	
Bolivia: Privatization Triggers a Water War.....	27
Chapter Three	
Chile: The Gradual Introduction of a Market-Driven System.....	41
Chapter Four	
Peru: Half-Hearted Reform Lead to a Mixed Result.....	51
Chapter Five	
Comparing the Three Case Studies.....	62
Bibliography	77

Introduction

Through my travels in South America, I learned that the lack of water was a major problem. In the summer of 2010, I worked in the Millennium Cradle House Orphanage in Cochabamba, Bolivia. In preparation, I studied the culture and history of Bolivia to get ready for my trip and one event that stood out to me was the Water War of Cochabamba. It made global headline news in 2000 when the people of Cochabamba took to the streets and held massive protests over the privatization of their water. The protests began peacefully, but the police began to use tear gas and clubs in an attempt to break the riot up.¹ By the end of the protests, 175 people were injured, two people were blinded and one seventeen-year-old boy was killed.²

The underlying water shortage continues to be an issue. When I lived in Cochabamba in 2010, my host family only had access to water at certain times of the day. Everyone in Cochabamba was allotted a certain amount of water each day. The trip to Cochabamba served as a reminder of how important water is for those who lack it. The situation also made me wonder if the shortages were a consequence of the Water War of Cochabamba.

In recent decades, the lack of access to water has become the subject of a large debate due to the scarcity of natural fresh water resources in some parts of the world. In 2000, the Millennium Summit of the United Nations adopted the Millennium

¹ Oscar Olivera and Tom Lewis. *Cochabamba!: Water War in Bolivia*. (Cambridge, Mass: South End Press, 2004): 34.

² Frontline World. "Timeline: Cochabamba Water Revolt." PBS: Frontline World, 2002.

Development goals. One of the goals is Environmental Sustainability, which is an attempt to provide safe access to water throughout the world. In 2010, the United Nations decided to act upon their concern that nearly 900 million people lacked access to water. The United Nations General Assembly stated that water was a human right and all humans should have safe access to it³

This thesis examines to what extent the Latin American experience suggests privatization is a promising path to deliver a reliable and affordable water supply. As of 2010, nearly 77 million people lack access to safe drinking water.⁴ Of the Latin American countries, the countries in South America have the highest number of people who lack access to a safe water supply. The countries in South America that have the lowest coverage are Bolivia, Peru, Paraguay, Colombia and Chile.⁵ The population, inequality and percentage of people living in urban areas affects the outcome of water privatization due to the challenge of providing access to safe drinking water in large, poor countries.

The goal of the thesis is to study whether water privatization has worked in Latin America by examining three case studies. Privatization is the “transfer of some or all of the assets or operations of public systems into private hands.”⁶ Many sectors can be privatized including gas, water and sanitation. Many financial organizations such as the World Bank and the International Monetary Fund (IMF) required developing countries to have a stable economy or to privatize state companies and public utilities, including water, before they would provide financial aid in order to help expand coverage in the

³ U.N. General Assembly, 64th session. “Resolution 292 [The Human Right to Water and Sanitation].” (A/Res/64/292). 3 August 2010. Quote on p. 2.

⁴ World Water Council. “4th World Water Forum: Water Problems in Latin America.” 2006.

⁵ UNICEF and the WHO. “Progress on Drinking Water and Sanitation 2012 Update.” UNICEF and the WHO, 2012: 13.

⁶ Jeffrey S. Wade. “The Future of Urban Water Services in Latin America.” *Bulletin of Latin American Research* 31:2 (2012): 210.

country with cheaper access. Although privatization works in certain sectors it is questionable whether it works in the water sector.

The thesis is broken down into five chapters. The first chapter discusses general pros and cons of water privatization in order to determine the parameters for studying the recent record in Latin America. The chapter defines privatization, explains why water privatization has become important in Latin America and beyond, clarifies the legal issues surrounding water privatization and exposes some of the general challenges with the privatization of water. The last part requires a discussion of water as an essential part of human life and highlights differences to other types of goods whose supply and production can be more readily privatized, such as for example steel. Key primary sources such as United Nations Summits and Reports, World Water Forums and World Bank reports are used for general information on water privatization and to show the legislation that has been passed in reference to water as a human right. Other sources used in this chapter include scholarly texts on the question of private versus public goods, the particular nature of water, and survey texts on water privatization in Latin America and the world.

Each case study is comprised of a chapter and focuses on five main dimensions that serve as the basis for the comparison in the last chapter. The first dimension is the demographic profile. This dimension provides the background information for each of the three case studies, which includes the population of the three countries and the cities where water privatization was attempted. The second dimension is the political and economic context. This dimension comprises a political and economic narrative to reveal who led water privatization in the country and made the decision to go along with water

privatization to help explain why water privatization was considered. The third dimension is the approach to water privatization. This dimension explains who bought the water system. The fourth dimension is the public response. It includes the positive and negative reactions of the people, including if water privatization has sparked any social protests in the country. The fifth dimension is the ultimate outcome. This dimension reveals the situation of the country after water privatization occurred or was attempted.

In order to show the effects of water privatization in Latin America and to conclude whether or not the Latin American experiences suggests that privatization is a promising path to an affordable water supply, the thesis focuses on three case studies from the Andean region: Bolivia, Chile and Peru, which differ in many aspects including population and the percentage of people living in rural versus urban areas. Bolivia is located in central South America and has a population of about 10 million people. A little over half of the population lives in urban areas, while the rest lives in rural areas. A large percentage of the population in Bolivia lives in rural areas because Bolivia has a large indigenous population. Peru is located in western South America and has the biggest population of the three case studies with nearly 30 million people. About three quarters of the population of Peru lives in urban areas. The remaining quarter of the population lives in rural areas due to the large indigenous population in Peru. Chile is located in southern South America and has a population of about 17 million people. Chile is the most urbanized of the three countries, with nearly all of its population living in cities and towns.

The second chapter of the thesis is a case study on Bolivia. Water privatization in Bolivia was attempted in two cities, Cochabamba and La Paz/ El Alto. It began in the late

1990s when the Bolivian government decided to auction off the water systems at the request of the World Bank and IMF. In Cochabamba, only one company, Aguas del Tunari, bid on the water system. The lack of competition created significant conflict in Cochabamba and increased prices dramatically. By 2000, there was fierce public protest against the water privatization, which resulted in the so-called Water War. The chapter on Bolivia is unique because I rely on personal narratives to portray the experiences of the people of Cochabamba during the Water War. One such narrative is *Cochabamba! Water War in Bolivia* by Oscar Olivera, who was part of the movement that ultimately removed water privatization from Cochabamba.⁷ I also use documents produced by the World Bank to provide detailed information about water coverage in Cochabamba and La Paz/El Alto.

The third chapter is a case study on Chile. Water privatization in Chile was a long, undisruptive process. In 1981, the military government in Chile created a water code, which had the goal of increasing and strengthening private participation in the water system. The water code reflected the interests of the government, which wanted to increase the security of private water rights and raise the efficiency of water uses. The water code caused broad privatization, affecting more than one city. Chile is a unique case study because it privatized its entire urban water system. I rely on technical and historical sources for the case study on Chile. For detailed information about water rights in Chile and the 1981 water code I used *Against the Current: Privatization, Water Markets, and the State in Chile*, a comprehensive analysis of property rights and

⁷ Oscar Olivera and Tom Lewis. *Cochabamba!: Water War in Bolivia*. (Cambridge, Mass: South End Press, 2004)

neoliberal policies.⁸ I also rely on the Private Sector Development, a section of the World Bank, to explain the approach to water privatization.

The fourth chapter is a case study on Peru. Water privatization in Peru was a different experience than in most of the countries in Latin America due to the government's determination to try a different approach. The Peruvian government attempted a different method through the transfer of water management to private enterprises in a "sporadic and localized" manner.⁹ Water privatization in Peru was a lengthy process and can be traced over multiple presidencies, including that of Alberto Fujimori, Alejandro Toledo and Alan García. I rely heavily on a scholarly article by Antonio Augusto Rossotto Ioris called *The Neoliberalization of Water In Lima, Peru* for my case study on Peru because it is one of the only scholarly articles on water privatization in Peru. It analyzes the privatization of the water system in Lima by examining the presidencies during water privatization and revealing their policies surrounding water.

The fifth chapter is a thematic comparison of the effects of water privatization in Bolivia, Peru and Chile to help determine whether or not water privatization holds promise to provide an affordable water supply in Latin America and beyond. In order to evaluate the three case studies, the thesis analyzes the five dimensions: the demographic profile, the political and economic context, the approach to water privatization, the public response and the ultimate outcome. Each of the five dimensions builds upon each other to help explain the process of water privatization. The dimensions highlight the similarities

⁸ Carl J. Bauer. *Against the Current: Privatization, Water Markets, and the State in Chile*. (Boston: Kluwer Academic Publishers, 1998).

⁹ Antonio Augusto Rossotto Ioris. "The Neoliberalization of Water In Lima, Peru." *Political Geography* 31.5 (2012): 266.

in some respects of two or three of the countries during their process of water privatization. The dimensions also help reveal how the three case studies are different throughout the water privatization process.

Chapter 1: Water: A Human Right or a Market-Driven Good?

Water is unlike any other resource because it is an essential part of human life. It is the basis of life on Earth and is necessary to sustain life, the environment and the existence of humankind. Water is needed for many things including food preparation, household services, basic sustenance, and agriculture. It is considered an essential resource because humans die without drinking water after a few days. In light of the basic need for water, it came to be seen as a human right. In 2010, the United Nations formally declared water to be a human right because of their deep concern that about 884 million people lacked access to safe drinking water. According to the UN resolution, human rights “are universal, indivisible, interdependent and interrelated, and must be treated globally, in a fair and equal manner.” The declaration of water as a human right means that all humans should be allowed access to a safe water supply and that states are responsible for promoting water as a human right.¹⁰ It also means that water should be protected and conserved so that it does not vanish due to the effects of pollution.

Around the world, there have been increasing problems with water, including lack of access and outright shortage. In many developing countries in Africa and Latin America, the number of people who lack access to safe water has increased. Another problem is the shortage of water, which has become a growing issue due to population growth, an increase in pollution and the continual climate change. There have been many debates on the scarcity of natural fresh water resources in some parts of the world. Water

¹⁰ U.N. General Assembly, 64th session. “Resolution 292 [The Human Right to Water and Sanitation].” (A/Res/64/292). 3 August 2010. Quote on p. 2.

is considered a limited resource because only 3% of the water in the world is fresh water and the majority of it is trapped in icebergs. Although water can be replenished through rain, it is still considered a limited resource and could diminish if actions are not taken to protect it. In order to address the concerns over the scarcity of water and the lack of access to water, the United Nations adopted the Millennium Development Goals at a summit held in 2000 in New York. One of the main goals is Environmental Sustainability, which is the protection of Earth's natural resources through resource management. Centrally important is the question of water management and the stated goals, which includes the right to a safe water supply.¹¹

Since the 2000 summit, the United Nations has been trying to achieve this goal. In 2010, the United Nations General Assembly adopted a resolution on the human right to water and sanitation, 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...”¹² This resolution responded to the concern of the United Nations that nearly 900 million people lacked access to safe drinking water, 77 million of them living in Latin America.¹³ The continents with the highest number of people that lack access to drinking water include Africa, South America and some parts of Asia, with less than 50% of the populations in some countries having access. The countries with the lowest coverage in Latin America are Peru, Bolivia, Chile, Paraguay and Colombia; where as of

¹¹ U.N. General Assembly, 55th Session. “Resolution 2 [United Nations Millennium Declaration].” (A/Res/55/2). 18 September 2000.

¹² U.N. General Assembly. 2.

¹³ World Water Council. “4th World Water Forum: Water Problems in Latin America.” 2006.

2010 only between 50 and 75 percent of the rural population had access to safe drinking water.¹⁴

To understand the challenges for water management created by the Millennium Development Goals, one has to understand the ways in which development experts approach the water question. The 1992 Dublin Principles may serve as a starting point. They were formulated in Dublin, Ireland at the International Conference on Water and the Environment (ICWE), which is an independent forum where scientists met to present their work in various fields. They laid out four principles of water management and recognized the scarcity of water due to overuse: “Freshwater is a finite and vulnerable resource, essential to sustain life, development and the environment; Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels; Women play a central part in the provision, management, and safeguarding of water; Water has an economic value in all its competing uses, and should be recognised as an economic good.”¹⁵ Since 1992, when the four principles were created, they have helped shape the decisions made on water.¹⁶

These four principles address the core question of water management and the shortage of water due to overuse. The first Dublin Principle recognizes freshwater as a finite and vulnerable resource. Water is considered a limited resource because there is no substitute, which means that no other resource can be used to replace it.¹⁷ The third

¹⁴ UNICEF and the WHO. "Progress on Drinking Water and Sanitation 2012 Update." UNICEF and the WHO, 2012: 13.

¹⁵ Miguel Solanes and Fernando Gonzalez-Villarreal. "The Dublin Principles for Water as Reflected in a Comparative Assessment of Institutional and Legal Arrangements for Integrated Water Resources Management." Global Water Partnership Technical Advisory Committee (TAC). (1999)

¹⁶ Vivienne Bennett, Sonia Dávila-Poblete, and Nieves Rico. *Opposing Currents: The Politics of Water and Gender in Latin America*. (Pittsburgh, PA: University of Pittsburgh Press, 2005): 1.

¹⁷ Hubert Savenije and Pieter van der Zaag. "Water as an Economic Good and Demand Management: Paradigms with Pitfalls." *Water International* 27:1 (2002) 99.

Dublin Principle focuses on the role of women, who have historically been in charge of procuring and managing water for both productive uses and domestic purposes.¹⁸ In the household, women have used water to cook, clean, do laundry and to care for their children and ill family members. They have also been known to play a role in the maintenance of facilities that provide water because they do not want there to be a problem with the provision of safe water.¹⁹ The part women have historically taken in reference to water is important to continue the protection of the water resources needed to increase access of water to the populations that lack access.

The second Dublin Principle states that water management should be based on a participatory method. Over the course of history, water management has changed and eventually resulted in private and public allocation. Allocation of water resources through mechanisms of the state began to ensure water availability “for human consumption, for sanitation, and for the production of food.”²⁰ Around the world, countries began with their water allocation in the control of the government. One of the first cases of public water allocation is seen with the Spanish Water Law of 1263, which lasted until 1799. It stated that all water belonged to the Royal Crown, unless the royal family granted private ownership.²¹ Many countries by the 19th century moved towards private allocation to improve efficiency, expand water coverage, increase investment, and relieve governments from the financial burdens of water allocation.²² Water allocation has

¹⁸ Robina Wahaj and Maria Hartl. “Gender and Water: Securing Water for Improved Rural Livelihoods: The Multiple-Uses System Approach.” International Fund for Agricultural Development. (2007): 3.

¹⁹ Bennett, Dávila-Poblete, and Rico. 17.

²⁰ Ariel Dinar, Mark W. Rosegrant, and Ruth Meinzen-Dick. “Water Allocation Mechanisms-Principles and Examples.” World Bank, Agriculture and Natural Resources Department and IFPRI.

²¹ Thomas V. Cech. *Principles of Water Resources: History, Development, Management, and Policy*. (New York: John Wiley & Sons, Inc, 2005): 214.

²² Naren Prasad. “Privatisation of Water: A Historical Perspective.” *Law Environment and Development Journal*. 3:2 (2007): 219.

transformed throughout the decades and now countries use a form of the three water allocation models to supply water to the public, which include public allocation, private allocation and public-private allocation.

In public allocation, water is controlled, regulated and administered by the government.²³ Many countries have used public allocation in the past because water is considered a public good. According to some sources, public allocation can also help “fund large-scale water development that is generally too expensive for the private sector.”²⁴ In developing countries, the people choose public allocation because it generally benefits the poor by controlling the water rates. Public allocation creates natural monopolies that form regulations and prevent water from being overpriced. In public allocation, the state is usually the provider as the government controls and regulates the water allocation system. The control of the state allows water to remain at low costs and to remain a public good. Some, such as Naren Prasad, a development economist who focuses on the privatization of public services, believe that it is the duty of the state to provide safe access to water.²⁵

Private allocation in some form was first considered in the mid-1800s in Europe due to the increase in urban growth. At the end of the 1800s, water was put back into the hands of public ownership due to “inefficiency, high costs or corruption or due to public health concerns in many European countries.”²⁶ Worldwide movement towards water privatization did not occur until the 1980s and 1990s.²⁷ Property rights are an important

²³ Stephen E. Draper. "Limits To Water Privatization." *Journal Of Water Resources Planning & Management* 134:6 (2008): 494.

²⁴ Draper. 494.

²⁵ Prasad. 219.

²⁶ Ibid.

²⁷ Ibid. 225.

aspect of defining privatization. A property right is the “exclusive authority to determine how a resource is used, whether that resource is owned by the government or by individuals.”²⁸ In private allocation, water is separated into “exclusive, secure, well-defined, nonattenuated, transferable, and enforceable private property rights, which may be bought and sold in private water markets by contract similar to other natural resources like oil or gold”²⁹ Exclusive and secure property rights allow a private actor control over water allocation. The private allocation of water has to be well defined to address human rights concerns. Since water is unlike any other good, the property rights have to explicitly state that water is transferable, can be sold and that the property rights can be enforced. It is necessary for the property rights of water to be precise in their meaning because water is needed by all human beings to survive. It is important that the property rights of private water allocation are stated; otherwise private corporations would not want to invest in water allocation.³⁰ Since water is different from other goods, private corporations have to make sure that investing in water would be valuable and worthwhile.

Public-private allocation divides water using both elements of private and public allocation in a number of different forms. The public-private allocation system uses the “virtues of the marketplace while minimizing the negative issues that may arise.”³¹ Under this system some parts of the allocation system will be in private hands to increase efficiency and access through competition by using water as a commodity in the market. Other parts of the allocation system will remain in public hands to make sure water rates do not increase exponentially and to make sure that people continue to gain access to safe

²⁸ Armen A. Alchian. *The Concise Encyclopedia of Economics*. 2.

²⁹ Draper. 494.

³⁰ Draper. 493-501.

³¹ *Ibid.*, 494.

water. In public-private allocation the water system can lean closer towards public allocation or private allocation with different effects.³² An example of public-private allocation that leans towards public allocation is the California Water Bank. A water bank is “designed to facilitate the transfer of developed water to new uses.”³³ Water banks can function in different ways. The California Water Bank allows the holder to sell their water rights to the state of California at a set price.³⁴ California can then later sell those water rights to other holders at a set price.³⁵ An example of public-private allocation that leans towards private allocation is the Colorado-Big Thompson project. The Colorado-Big Thompson project, finished in 1957, collects melted snow from the Colorado River and delivers it to farms, ranches and people.³⁶ This project leans towards private allocation because the water rights can be sold in private transactions between water users from a specific area.³⁷

The fourth Dublin Principle opened up the possibility to see water as a commodity.³⁸ Historically, water has been considered to be a public resource, as well as a public good. A public good is “characterized by non-excludability (individuals not paying for the good cannot be excluded) and by non-rivalry consumption (that is, it does not cost anything when, in addition, other persons consume the good).”³⁹ Public goods are often provided by the state or voluntary organizations. When water is considered a public good,

³² Ibid. 501.

³³ Lawrence J. MacDonnell. “*Water Banks: Untangling the Gordian Knot of Western Water.*” 1995.

³⁴ Draper. 501.

³⁵ Ibid.

³⁶ Northern Colorado Water Conservancy District. “Northern Water C-BT Project.”

<<http://www.northernwater.org/WaterProjects/C-BTProject.aspx>>

³⁷ Draper. 501.

³⁸ Bennett, Dávila-Poblete, Rico. 1.

³⁹ Adam Kuper and Jessica Kuper. *The Social Science Encyclopedia*. 2. (London; New York: 2004): 1206

the government has the duty of making sure that all its citizens have equal access to water.⁴⁰

The fourth Dublin Principle considers water an economic good to promote more efficient use, conservation and the protection of water resources.⁴¹ There are two basics that help determine the value of water: demand and supply. Demand is the service to humans and if people will pay for that service. Supply is the cost it takes to provide the good.⁴² The treatment of water as an economic good created an increase in the interest of private corporations to invest in the previously defined public good.

In the 1980s and 1990s, the level of international organization pressure has increased to move towards private allocation. The World Bank, before the 1990s, supported the economic approach of Keynesianism, which is a theory that focuses on the total spending in the economy, also known as aggregate demand, which is influenced by public and private decisions, and its effects on output and inflation.⁴³ Keynesian economics also supports a mixed market, which includes the role of the government as regulator, distributor, and owner. After the 1990s, the World Bank began to support the Washington Consensus, which favors the free market and does not include the role of the government. The Washington Consensus consists of ten policies adopted by the United States government and the United States-based international financial institutions to help developing countries increase economic growth. The ten policies focus on a neoliberal approach, which stresses the importance of the incorporation of developing countries into the international economy. Fiscal discipline, public expenditure priorities, tax reform,

⁴⁰ Cech. 383.

⁴¹ Jessica Budds and Gordon McGranahan. "Are the Debates on Water Privatization Missing the Point? Experiences in Africa, Asia and Latin America." *Environment and Urbanization*. 15:87 (2003): 91.

⁴² Cech. 381.

⁴³ Alan S. Blinder. *The Concise Encyclopedia of Economics*. 2.

financial liberalization, exchange rates, trade liberalization, the increase of foreign direct investment, privatization, deregulation, secure intellectual property rights and the reduced role of the state are the main ideas stated by the Washington Consensus. The ten policy recommendations were considered controversial due to their focus on neoliberal policies, which caused the World Bank and the International Monetary Fund to adopt them through conditionality.⁴⁴

One of the policies of the Washington Consensus that the World Bank promoted was privatization. The World Bank saw the government's participation in infrastructure as inefficient due to the lack of innovation, which led them to turn towards the private sector to promote economic growth.⁴⁵ Privatization is the "transfer of some or all of the assets or operations of public systems into private hands."⁴⁶ Privatization occurs in many sectors including electricity, water, irrigation, sanitation, gas, telecom and non-service areas. There are many different areas that private participation is a part of including management, operational activities, billing activities and maintenance.⁴⁷ For some sectors such as electricity and water, private corporations can buy the existing infrastructure. Of the many policies in the Washington Consensus, privatization was one of the most encouraged by the World Bank.

Privatization has occurred throughout the world in many sectors from basic productive industries, such as steel mills, coal mines and oil companies, to more essential services, such as electricity and telephones. In the 1980s, there was a debt crisis in Latin

⁴⁴ WHO. "Trade, Foreign Policy, Diplomacy and Health: Washington Consensus." (2012)

⁴⁵ Prasad. 230.

⁴⁶ Jeffrey S. Wade. "The Future of Urban Water Services in Latin America." *Bulletin of Latin American Research* 31:2 (2012): 210.

⁴⁷ Economic Commission for Latin America and the Caribbean. "Progress in the Privatization of Water-Related Public Services: A Country-By-Country Review for South America." ECLAC (1998): 4.

America, which helped cause the push of the World Bank and IMF toward the request of countries to privatize their public sectors in favor of a free-market economy. The 1980s debt crisis was a financial crisis that caused countries to be unable to pay off their foreign debt. This time period is often known as “La década perdida,” or lost decade, because it caused extreme hardships in Latin America, including bankruptcy, an increase in unemployment and the loss of savings.⁴⁸ The debt crisis in the 1980s led to “La década perdida,” which caused a push towards privatization by international organizations to promote economic growth.

Although some services, such as electricity, can be considered more or less essential, the privatization of water presented a different challenge due to its necessity for survival. To address these challenges water privatization is broken down into two distinct components. The first is the privatization of water services and the second is the privatization of water resources. The World Bank built on the 1992 Dublin Principles to propose privatization of water as an option to increase water efficiency, encourage private investment, increase economic growth, continue irrigation development and redirect government resources to other areas in developing countries.⁴⁹

The World Bank, IMF, and World Trade Organization (WTO) required developing countries to have “structural adjustments” to address their economic problems and increase growth in order to receive loans. In the 1980s and 1990s, the conditions typically resulted in the privatization of public enterprises.⁵⁰ For the most part, privatization of water has not occurred in Latin America due to the lack of access to a

⁴⁸ Harry Vanden and Gary Prevost. *Politics of Latin America: The Power Game*. (New York: Oxford University Press. 2009): 441.

⁴⁹ Draper. 496.

⁵⁰ World Bank: Operations Policy and Country Services. “Review of World Bank Conditionality.” (2005): 1.

clean water supply but due to the government's need for aid. There are many arguments for the private sector used by the World Bank and IMF to promote privatization, which include that it supplies the "financial resources needed to improve the situation in developing countries,"⁵¹ creates greater efficiency, increases investment and provides greater access and availability.⁵² There are also many arguments against the private sector, specifically in reference to water privatization, including the threat of failing to protect basic human rights to water and sanitation, the failure to provide access to rural areas and the creation of natural monopolies that have a tendency to overprice and under produce water.⁵³

The privatization of water has arguments both for privatization and against privatization. Stephen E. Draper is the president of the Draper Group, which is a private company of Engineering Consultants who focus on water policy particularly in the Southern States in the United States. He is one of the few authors who argue for water privatization. He is a strong advocate for water privatization because he believes that water scarcity was partially created through the inefficiencies and failures of water allocation by the public sector.⁵⁴ Draper believes that private water allocation increases efficiencies and access to water supply. He also believes that it increases the conservation of water and decreases the waste of water because it creates a higher cost and causes people to use less water. Private allocation helps stabilize the value of water through a more responsive and flexible market. It also helps increase economic growth in the

⁵¹ José Esteban Castro. "Neoliberal Water and Sanitation Policies as a Failed Development Strategy: Lessons From Developing Countries." *Progress In Development Studies* 8:1 (2008): 63.

⁵² Wade. 210.

⁵³ Ibid. 210.

⁵⁴ Ibid. 493.

country by encouraging private investment.⁵⁵ Although Draper is a strong supporter of water privatization, he does recognize the need for some functions, including the power over the transfer of water rights, to remain in the hands of the state in order to have a successful water allocation system.⁵⁶

Jeffrey Wade, author of "The Future of Urban Water Services in Latin America," helps point out the benefits of privatization. In developing countries, it is harder for the government to maintain efficient water systems due to the high costs. According to Wade, privatization would help bring the capital needed for the water systems into the country. Although Wade recognizes some of the benefits of privatization, he argues that a public-private water system is best.⁵⁷

Jennifer L. Naegele is a lawyer that advocates for environmental protection. Her paper "What is Wrong with Full-Fledged Water Privatization," presented to the U.N. Human Rights Commission, focuses on the human right to water and summarizes the case against privatization. According to Naegele, the biggest problems with water privatization are that it tends to weaken the water quality, fails to provide safe water and cuts off service to those who cannot afford the dramatic increase in price. Although those are the main problems, private water allocation can also cause public health problems, threats to local jobs and increases in government corruption. The threats to local jobs are created because privatization often increases the effectiveness of water management, causing less need for workers, and the transnational corporations frequently bring in workers from other countries. The increases in government corruption are created

⁵⁵ Ibid. 501.

⁵⁶ Draper. 493.

⁵⁷ Wade. 209-210

because states grant contracts to associates rather than using the auction process.⁵⁸ In order to avoid taking huge risks, the transnational corporations that invest in privatization take certain measures, including the formation of subsidiaries and the addition of provisions in the contracts.⁵⁹ Due to these measures of protection, the transnational corporations tend to increase debt when they are removed or pull out from the country and manipulate contracts to raise prices and increase their profits.⁶⁰ The creation of exploitative contracts by transnational corporations causes a major argument against water privatization. Naegele also points out that the privatization of water is a violation of human rights unless the state acts as regulator and has the control to make sure access to it is not denied. The right to water, according to the United Nations 2010 resolution, states that no person can be denied enough water to fulfill basic needs. In 2002, the U.N. Committee on Economic, Social and Cultural Rights stated that access to water is a human right and that states are required to provide access to water to those who do not have it.⁶¹ Therefore, states must supply drinking water to all people and ensure equal access to water of sufficient quality, as well as interfere if there is a water shortage or if the water suppliers have stopped access to it.⁶² All of the problems pointed out by Naegele are major reasons why water privatization is such a controversial approach and is dramatically protested against in developing countries.

⁵⁸ Naegele. 113.

⁵⁹ Budds and McGranahan. 101.

⁶⁰ Naegele. 113.

⁶¹ U.N. Committee on Economic, Social and Cultural rights, 29th session. "General Comment No. 15 [The Human Right to Water]." (E/C.12/2002/11): 11-29 November 2002.

⁶² Naegele. 114.

Bruce Rich, “an attorney and author who has served as senior counsel for major environmental organizations,” also argues against water privatization.⁶³ He argues that water is a human right, like Naegele. He is also against water privatization because in order to expand water coverage in developing countries, transnational corporations have to invest more money, which results in huge tariff increases for the people of that country.⁶⁴ The rise in tariffs is hard on people from poorer countries because they do not have enough money to pay for their water with the increased prices. Oriol Miroso and Leila M. Harris, authors of the “Human Right to Water: Contemporary Challenges and Contours of a Global Debate,” highlight the Coalition Against Water Privatization (CAWP). The CAWP believes that privatization goes against peoples “constitutional right to water” and that water free of cost should be provided to all people.⁶⁵ The failure of water privatization in many countries caused more people to take a stance against it, which created more arguments against it.

The history of the allocation of water in Latin America begins with the administration of the state, which helped to structure the existing water laws and helped govern the standard method of resource management.⁶⁶ The water laws of each Latin American country helped create systems of allocation that only benefited the wealthy. This allowed the wealthy to control the water rights and exclude other people in the country from making decisions. In Latin America concessionary contracts were created to give access to important public services including electricity, gas, water,

⁶³ Bruce Rich. "Rights To Water And Privatization." *Environmental Forum* 28.1 (2011): 20. *Environment Complete*.

⁶⁴ Rich. 20.

⁶⁵ Oriol Miroso and Leila M. Harris. "Human Right to Water: Contemporary Challenges and Contours of a Global Debate." *Antipode* 44:3 (2012): 939.

⁶⁶ Paul B. Trawick. "Going with the Flow: The State Contemporary Studies of Water Management in Latin America." *Latin American Research Review* 40:3. 443.

telecommunications and transportation.⁶⁷ According to Paul Trawick, a social scientist, any project that would improve water supply would endanger the existing water rights, which is a main concern of many communities who rely on various methods to receive water.⁶⁸ Water privatization, which mostly occurred in the 1990s, was one of the last sectors to be privatized.⁶⁹

Almost every country in Latin America experienced some form of water privatization in the 1990s and 2000s. Each of their experiences with water privatization was different. Some countries, such as Chile, experienced large-scale urban water privatization, which encompassed their country. Other countries, such as Brazil and Bolivia, only experienced water privatization in certain cities. Countries such as Mexico, Peru and Colombia experienced mixed-company water privatizations, which meant that they had both public and private participation in their water systems. Although most Latin American countries experienced water privatization in some form, they were not all successful.

Water privatization has been a widespread, contentious issue in many countries in Latin America. In Mexico, the World Bank requested that the government pass the National Water Law (*Ley de Aguas Nacionales*) in 1992. Due to its reliance on World Bank funding, Mexico complied with the Bank's request and passed a law, to privatize the water system.⁷⁰ Despite the privatization of the water system, however, problems with reliability of service and access continue. In Argentina, the process of water privatization

⁶⁷ J. Luis Guasch, Jean-Jacques Laffont and Stéphane Straub. "Renegotiation of Concession Contracts in Latin America." *International Journal of Industrial Organization*, 26:2 (2008).

⁶⁸ Trawick. 443.

⁶⁹ Federico Busaños, Evamaria Uribe and Robert Willig. "Can Privatization Deliver? Infrastructure for Latin America." Inter-American Development Bank. 1999.

⁷⁰ Margaret Wilder and Patricia Romero Lankao. "Paradoxes of Decentralization: Water Reform and Social Implications in Mexico." *World Development* 34:11 (2006): 1982.

was dramatic due to the scale of the privatization of all sectors controlled by the state, including electricity, railways, water, sewerage and gas, and the speed at which the government attempted to privatize.⁷¹ Argentina had to renegotiate its privatization contracts due to the decline of the privatized public sector as a result of the devaluation of the peso and the economic crisis of 2002.⁷² In Uruguay, 60% of the popular vote rejected the referendum to privatize water with a resounding 'no' due to the negative feelings surrounding water privatization.⁷³

All over Latin America, the privatization of water altered the existing water laws. It was violently protested in many Latin American countries including Ecuador, Bolivia and Peru. These Andean countries protested against water privatization because they believed it to be an assault on their sovereignty.⁷⁴ The people of Latin America consider water to be a right for all humans, but the government has not treated it that way as seen through methods such as privatization. This led to legal action under the Latin American Tribunal, which was created in 1998 in Costa Rica to address issues with water and promote the preservation of water.⁷⁵ Its foundational document is the Latin American Declaration of Water, which states that water is a human right and that the Latin American population should receive access to safe water. The foundational document of the Latin American Tribunal goes back to the 1970s when international development organizations began to concentrate on the basic needs of humans, which increased concern for water access. The rulings of the Latin American Tribunal center upon the

⁷¹ Werner Baer, and Gabriel Montes-Rojas. "From Privatization to Re-Nationalization: What Went Wrong With Privatizations in Argentina?" *Oxford Development Studies* 36:3 (2008): 324.

⁷² Baer. 327.

⁷³ Iñigo Herraiz. "Uruguay Declara en Referéndum Popular el Agua Como "Bien Público" y la Protege de Privatizaciones." *Agencia de Información Solidaria* (2004).

⁷⁴ Trawick. 455.

⁷⁵ Ibid. 941.

idea that water is a human right because it is the basis of its foundation. The Latin American Tribunal was considered a success and by 2005 it encompassed all of Latin America. It recently dealt with issues surrounding indigenous water rights. One case was in Peru in 2007, where the government of Peru was transferring water from lagoons of indigenous communities to other areas of Peru without consultation or compensation.

To analyze the often-contentious experience of water privatization, three case studies were chosen. The three countries include Bolivia, Chile and Peru. All three countries are located in the Andean region in South America. Although they have a similar location in South America, they were chosen as contrasting case studies because they have had very different experiences with water privatization. In order to compare the experiences of water privatization in the three case studies, five dimensions were chosen. They include the demographic profile, the political and economic context, the approach to water privatization, the public response, and the ultimate outcome.

The demographic profile is one of the dimensions used to compare water privatization in the three countries because it provides the background needed to understand why and how water privatization occurred. This dimension provides a profile of the locations where privatization was attempted. The profile presents general information about the situation the country was in leading up to and during water privatization.

The political and economic context is the second dimension. It specifies who led privatization in the country, such as the country's government. It includes a political narrative to reveal who ultimately made the decision to allow privatization to occur and why water privatization was considered. The political narrative explains what was

happening in the country at the time, including if there was a change in policies, such as countries moving from the nationalization of sectors to the privatization of sectors. This dimension also includes whether there was IMF or World Bank involvement as an incentive to privatize their water.

The third dimension is the approach to water privatization. It includes to whom the water system was sold, such as a transnational corporation. There are three main transnational corporations used for water privatization in the world. Lyonnaise des Eaux is one of three transnational corporations that control the worlds private water sector. The other two transnational corporations are Vivendi SA and RWE-Thames Water. These three corporations control almost 40% of the worlds water market share and are involved in the water systems of over 200 countries.⁷⁶ This dimension also specifies how the country had to prepare for privatization of its water system and the role of the government as regulator.

The public response is the fourth dimension used to compare the three case studies. Most importantly, this encompasses whether water privatization in the country was positive or negative according to public opinion. It also exposes if there was any disapproval or complaints from the people, including if there were any social protests. This dimension shows the response the public had to the economic change that occurred due to water privatization.

The ultimate outcome is the last dimension used to compare the three case studies and their experiences with water privatization. The ultimate outcome reveals the changes the country has undergone since the implementation of water privatization. Some of the changes that occurred due to water privatization were economic, social and political. This

⁷⁶ Naegele. 112.

dimension helps determine to what degree water privatization changed the situation in the three countries.

Chapter 2: Bolivia: Privatization Triggers a Water War

The first case study chosen to assess the success of water privatization is Bolivia.

This country was chosen because it had a very unique experience with water privatization, which resulted in a water war. The massive increase in water rates caused an uproar in Cochabamba bringing the population together to end privatization. Strikes and protests threatened to cut Cochabamba off from the rest of the country.⁷⁷ This strong reaction by the population caused a reversal of the water privatization program in Cochabamba. La Paz/ El Alto was another city in Bolivia that underwent water privatization, which also resulted in the reversal of the privatization of its water system. The experiences in Bolivia helped expose the failures of water privatization.

Demographic Profile

Bolivia is an Andean country located in central South America. It has two capitals, La Paz and Sucre. Bolivia has a population of approximately 10 million people, consisting of four main ethnic groups: Quechua with 30%, mestizo with 30%, Aymara with 25% and white with 15%. Bolivia is considered one of the poorest countries in Latin America, with an extremely high inequality rate, resulting in over half of its population living below the poverty line.⁷⁸ The World Bank has considered Bolivia a lower-middle income country for twenty-five years and it is considered to be in the top third of the

⁷⁷ Forrest Hylton and Sinclair Thomson. *Revolutionary Horizons: Past and Present in Bolivian Politics*. (London; New York: Verso, 2007): 103.

⁷⁸ CIA World Factbook.

most unequal countries in the world.⁷⁹ In South America, Bolivia is the poorest country, with 51.3% of the population below the poverty line.⁸⁰

Bolivia has some of the highest inequality levels in all of Latin America for many reasons including the fact that the country is landlocked and has had a large increase in population over a short period of time causing an extended period of political instability and many social revolutions.⁸¹ In 1952, Bolivia experienced a national revolution that would have a large effect on the social and political aspects of the country. It resulted in the nationalization of the country's tin and the agrarian reform of 1953, which distributed land to indigenous farmers.⁸² The revolution of 1952 began the move in Bolivia toward national reform. The population in Bolivia has gone from 2.7 million in 1950 to 8.3 million in 2000.⁸³ Since the 1970's, the population of Bolivia has doubled, which has caused major difficulties in providing safe water and sanitation. According to the World Bank, in 2010 the rural population of Bolivia was about 3.3 million and the urban population of Bolivia was about 6.3 million.

La Paz/ El Alto, Santa Cruz de la Sierra, and Cochabamba are the three largest cities in Bolivia. La Paz/ El Alto is the administrative capital of Bolivia and located close to Lake Titicaca and the Peruvian border. Nearly 900,000 people live in the city of La Paz and over one million people live in El Alto.⁸⁴ El Alto is on a high plain above La Paz and has a high rate of inequality due to the extreme levels of unemployment and large

⁷⁹ Benjamin Kohl and Linda C. Farthing. *Impasse in Bolivia: Neoliberal Hegemony and Popular Resistance*. (London: Zed Books Ltd, 2006): 63.

⁸⁰ CIA World Factbook.

⁸¹ Vanden and Prevost. 557.

⁸² James V. Kohl. "Peasant and Revolution in Bolivia, April 9, 1952-August 2, 1953." *The Hispanic American Historical Review* 58:2 (1978): 239.

⁸³ Census Bureau. "Population Trends: Bolivia." Population Division, DESA, United Nations: 146.

⁸⁴ "La Paz." *Britannica Concise Encyclopedia*. (Chicago: Encyclopedia Britannica, 2009). *Credo Reference*.

population. El Alto also is made up of mostly indigenous people.⁸⁵ Cochabamba is located closer to the center of Bolivia. It is the third largest city in Bolivia, with more than 600,000 people living in the city and over one million people living in the surrounding areas of the city.⁸⁶ Santa Cruz de la Sierra is located in eastern Bolivia. It is the largest city in Bolivia with over 1.5 million people.

Political and Economic Context

The IMF and World Bank have had a degree of control and influence over Bolivia due to its high levels of poverty and inequality, resulting in a constant need for loans. As Bolivia is the poorest country in South America, it needs to receive loans, which means it cannot afford to reject the recommendations of the IMF and World Bank.⁸⁷ During the 1980s, Bolivia underwent a period of nationalization and by 1985, 70% of the country's economy was controlled by the government.⁸⁸ In 1984, Bolivia was in dire need of help due to its economic situation. The IMF tried to control inflation in Bolivia and imposed a stabilization program, which ended up creating great hardships causing nearly two million Bolivians to face starvation.⁸⁹ During this time, the World Bank was particularly active in promoting neoliberal policies along with the Washington Consensus throughout Bolivia in order to increase economic growth.

In 1985, the Bolivian Government headed by Víctor Paz Estenssoro created a 'new policy agenda' or New Economic Policy based on the Washington Consensus in an

⁸⁵ Lazar Sian. *El Alto, Rebel City: Self and Citizenship in Andean Bolivia*. (Durham and London: Duke University Press, 2008).

⁸⁶ Oscar Olivera and Tom Lewis. *Cochabamba!: Water War in Bolivia*. (Cambridge, Mass: South End Press, 2004): 7.

⁸⁷ Jennifer Naegele. "International Perspective: What is Wrong With Full-Fledged Water Privatization?" *Journal of Law and Social Challenges* 6 (2004): 124.

⁸⁸ Kohl and Farthing. 63.

⁸⁹ Vanden and Prevost. 572.

attempt to help the country's economy.⁹⁰ There were four basic factors included in the 'new policy agenda': a neoliberal model including privatization, agricultural modernization and labor reform; a 'new social policy'; social programs of health, education and employment created to protect social groups; and administrative decentralization.⁹¹

By the 1990s, many public enterprises and natural resources faced privatization to meet the requirements of the World Bank and the IMF.⁹² The Ley de Capitalización, or the Law of Capitalization, was created as one of the last steps of the 'new policy agenda' process. The goal of this law was to privatize the last five state utilities: "the national mining company, the mainstay of the Bolivian economy, and the oil, gas, airline, railway and telephone companies."⁹³

In an attempt to promote economic growth, the Bolivian government headed by Jaime Paz Zamora sold numerous public and state-owned companies to private companies. The Ley de Privatización of 1992, or the Law of Privatization, and the regulatory decree of 1995 helped manage the privatization process. In order to impose legislation and control the provision of public utilities, such as water, the Sistema de Regulación Sectorial (SIRESE), or the system of sector regulation, was created. SIRESE helps "promote competition and efficiency in the provision of public utilities; grant, modify and revoke concession, licenses and authorizations, monitor the correct provision

⁹⁰ James F. Petras, and Henry Veltmeyer. *Social Movements and State Power: Argentina, Brazil, Bolivia, and Ecuador*. (London; Ann Arbor, MI: Pluto Press, 2005): 185.

⁹¹ Petras and Veltmeyer. 185.

⁹² Håvard Haarstad, and Vibeke Andersson. "Backlash Reconsidered: Neoliberalism and Popular Mobilization in Bolivia." *Latin American Politics & Society* 51.4 (2009): 7.

⁹³ Petras and Veltmeyer. 185.

of public services...”⁹⁴ SIRESE was created in 1994, during the presidency of Gonzali Sánchez de Lozada, and was a key factor in advancing economic regulation.⁹⁵

Through the implementation of the neoliberal model, motivations for water privatization in Bolivia increased. As of 2000, Bolivia has 622.5 cu km of total renewable water resources. The freshwater withdrawals for domestic, industrial and agricultural uses are 1.44 cu km/yr, segmented into 13% domestic, 7% industrial and 81% agricultural uses. The freshwater withdrawal per capita is 157 cu m/yr.⁹⁶

Approach to Water Privatization/ Public Response

The three main cities that underwent water privatization, Santa Cruz, La Paz/El Alto and Cochabamba, each have had different experiences with their water utilities. Santa Cruz manages its own water through cooperatives, and it is considered one of the best-managed utilities in Latin America. In an attempt to increase economic growth, the president of Bolivia decided to privatize the water utilities in La Paz/ El Alto and Cochabamba, which was one of the World Bank’s conditions to receive a loan.⁹⁷

Water is considered a public good, which creates complications with its privatization because the government has to regulate it. In order to consider privatization, the Bolivian government had to rewrite some of the legislation. This resulted in Law 2029 in 1999 passed by the Bolivian parliament, which was created with the goal to privatize Bolivia’s water system. The law removed the guarantee to deliver water to rural areas, which was considered a Bolivian right. Many cities, such as the city of

⁹⁴ Economic Commission for Latin America and the Caribbean. “Progress in the privatization of water-related public services: a country-by-country review for South America.” ECLAC (1998):18.

⁹⁵ Economic Commission for Latin America and the Caribbean. 19.

⁹⁶ CIA World Factbook.

⁹⁷ “Bolivia Water Management: A Tale of Three Cities.” *Précis*. World Bank Operations Evaluation Department, 2002:1.

Cochabamba, only had some of its population connected to the central water system when the law was passed. The majority of the people not connected to central water did not have the means to build a well, which is the source of water for many people in rural areas.⁹⁸ Law 2029 also prevented the distribution of water by any source other than the private company the government water system was sold to and additionally prevented the people from collecting rainwater without a permit.⁹⁹ The law was created in an attempt to help privatize the water system of Bolivia, but resulted in the creation of extreme hardships for the Bolivian people.

The water systems of two different cities in Bolivia were sold to transnational corporations in an effort to heed the recommendations of the World Bank and privatize their water systems. Bolivia needed foreign assistance because the government had lost the revenues from oil and gas due to the sale of the state hydrocarbons company, which helped increase debt.¹⁰⁰ The World Bank had a lot of influence over Bolivia because it provided concessionary loans with the condition that the privatization of public services occurs.¹⁰¹ In order to sell the water systems to transnational corporations, auctions were held and the highest bidder gained control of the water system.

The first city to have its water system sold off in an attempt at privatization was La Paz/ El Alto. It was sold to the Aguas de Illimani consortium, which was a part of the larger transnational corporation known as Lyonnaise des Eaux. The Bolivian government granted Aguas de Illimani consortium a thirty-year concession contract to provide water

⁹⁸ Olivera and Lewis. 8-9.

⁹⁹ Kohl and Farthing. 164.

¹⁰⁰ Kohl and Farthing. 151.

¹⁰¹ Ibid. 162.

supply to La Paz/ El Alto and the surrounding area.¹⁰² The transnational corporation states that it had invested 60 million dollars in infrastructure, but others believe it was only 3 to 5 million dollars.¹⁰³ The contract resulted in 200,000 people in El Alto lacking access to safe drinking water. During this time, about 70,000 people were unable to pay for water access because the water fees were increased to 445 dollars a year, which is equivalent to about “nine minimum wages.”¹⁰⁴ The minimum wage for Bolivians at this time was about 60 dollars a month.¹⁰⁵ The huge increase in water fees made it impossible for the majority of Bolivians in La Paz/ El Alto to pay for water. The people of La Paz/ El Alto decided to go on a peaceful strike to compel the Bolivian government to take action and force Aguas de Illimani out of the country. In order to prevent the transnational corporation from leaving, the Bolivian government attempted to revise the contract with Aguas de Illimani, who rejected the attempts. After Aguas de Illimani refused to revise the contract, the people went on strike on January 10, 2005 challenging their right to water.¹⁰⁶ The government of Bolivia terminated the contract three days later.

Despite some success in the access to safe drinking water in La Paz/ El Alto, the Bolivian people went on strike. From 1988 to 1999, the central water system connections in La Paz/ El Alto increased from 75 to 92 percent of the population. The availability of the number of hours water was available a day to people also increased from 19 hours to 22.5 hours a day. Although the water system connections and the availability of water

¹⁰² Economic Commission for Latin America and the Caribbean. 19.

¹⁰³ Buchichio. “To Defend Water is to Defend Life.” Choike.org. (Project of the Instituto del Tercer Mundo, NGO in Consultative Status with the Economic and Social Council of the United Nations). 20 Jan 2013. http://www.choike.org/nuevo_eng/informes/2603.html

¹⁰⁴ Buchichio. “To Defend Water is to Defend Life.”

¹⁰⁵ Hylton and Thomson. 103.

¹⁰⁶ Buchichio. “To Defend Water is to Defend Life.”

increased, high tariffs were put in place on the water and raised water rates occurred.¹⁰⁷ With the rise in prices, the Bolivian people were unhappy with the water privatization in La Paz/ El Alto in spite of increased access, which helped spark the peaceful strike that occurred. The water contract with Aguas de Illimani was terminated a few years after privatization of the water system was put into place.¹⁰⁸ Aguas de Illimani was removed from Bolivia after the contract was terminated. They refused to accept the contract termination and have threatened to sue Bolivia for 120 million dollars.¹⁰⁹

The second Bolivian city to have its water system privatized was Cochabamba. In 1999, the World Bank and the International Development Bank wanted to help with the water situation in Cochabamba, Bolivia. They had declared privatization of the water in Cochabamba a condition to receive loans and suggested that there be “no public subsidies.” Subsidies are traditionally used to help keep the price of water from greatly increasing.¹¹⁰ In order to promote the neoliberal agenda the World Bank declared that the government would get \$600 million of debt relief if they privatized the water system of Cochabamba.¹¹¹ At the end of 1999, Hugo Banzer, the Bolivian President, decided to go along with the recommendation of the World Bank to privatize and sell one of Bolivia’s most important resources, water.¹¹²

The water system of Cochabamba only had one bidder, Aguas del Tunari, which was awarded the contract. Aguas del Tunari, partnered with International Water, was a part of Bechtel, which is a large U.S. owned transnational corporation. Aguas del Tunari

¹⁰⁷ “Bolivia Water Management: A Tale of Three Cities.” 2.

¹⁰⁸ Degol Hailu, Rafael Osorio and Raquel Tsukada. “Water Privatisation and Renationalisation in Bolivia: Are the Poor Better Off?” Report from the International Policy Centre for Inclusive Growth. 2009: 1.

¹⁰⁹ Buchichio. “To Defend Water is to Defend Life.”

¹¹⁰ Executive Summary, *Bolivia Public Expenditure Review*, (Washington, DC: World Bank, 1999).

¹¹¹ Hylton and Thomson. 103.

¹¹² Petras and Veltmeyer. 186.

had considerable bargaining power when creating their contract with the Bolivian government because it had zero competition due to the fact that it was the only company to bid on the water system of Cochabamba. The Bolivian government granted Aguas del Tunari a forty-year, 2.5 billion dollar contract, which awarded them full control over the water rights in the district.¹¹³ The contract also stated that the water rates would increase every year according to the consumer price index in the United States and guaranteed Aguas del Tunari a 16 percent rate of return per year.¹¹⁴ Aguas del Tunari received control of the Cochabamba water system as well as the ground water according to the contract. This meant that they could force people to pay for their own wells and to collect rainwater.¹¹⁵ Soon after Aguas del Tunari took over control of the water system, 25% of the population in Cochabamba lost the ability to tap ground water.¹¹⁶

The people of Cochabamba were able to see the results of the water contract signed with Aguas del Tunari almost immediately. The water rates increased dramatically, upwards of 200%.¹¹⁷ Aguas del Tunari increased the water bills of the people of Cochabamba stating that they were being charged more because they were using more water than they had before the company took over. This however proved not to be the case and Aguas del Tunari never was able to fully explain the drastic increase in the water bills.¹¹⁸ The price of water forced many Bolivians to pay twenty dollars or more for their water bills when they only had wages an average of less than one hundred dollars a month. At this point, the situation became so drastic that many people could not

¹¹³ Naegele. 124.

¹¹⁴ Olivera and Lewis. 9.

¹¹⁵ Kohl and Farthing. 164.

¹¹⁶ Ibid. 164.

¹¹⁷ Naegele. 125.

¹¹⁸ Olivera and Lewis. 10.

afford to pay the water bill. The Banzer administration reviewed the “market regulation,” aimed at allowing water cost to be a quarter, \$15, of a minimum wage households earnings, \$60, in order to prevent strikes.¹¹⁹ The people were not satisfied that nothing had changed when the administration reviewed its responsibilities and decided to continue their strikes. Many people in Cochabamba lacked water after Aguas del Tunari took over the water system because they were unable to pay the skyrocketing bills, unable to build their own wells and were forced to buy permits to collect rainwater.¹²⁰

Tensions continued to rise, as the Bolivian people were unable to receive access to safe drinking water. In Cochabamba, mass mobilization began to occur shortly after Aguas del Tunari privatized the water system. In 2000, these public protests formed a movement of a “Coordinating Body for the Defense of Water and Life,” which later became known as the Water War.¹²¹ It included seven days of protests, strikes and marches, during which 200 protestors were arrested, 123 people including civilians and policemen were injured and 1 person was killed.¹²² During the Water War, the government sent in 1200 soldiers and police to Cochabamba in an attempt to take control of the city.¹²³ The president of Bolivia at the time, Jorge Quiroga, was forced to terminate the water contract with Aguas del Tunari due to the fierce protests that put the country in a state of emergency. The reversal of the water contract in Cochabamba marked one of the first times in Bolivian history that the plans of the government had been altered by the populace in regards to the control of its natural resources.¹²⁴ Bolivia has many natural

¹¹⁹ Hylton and Thomson. 103.

¹²⁰ Naegele. 125.

¹²¹ Petras and Veltmeyer. 187.

¹²² Naegele. 125.

¹²³ Hylton and Thomson. 103.

¹²⁴ Petras and Veltmeyer. 187.

resources, such as gas and oil, but water is the resource the Bolivian people needs the most. The corporation, Aguas del Tunari, was removed from the country following the termination of the water contract by the Bolivian president. Due to the strong reactions against water privatization in Bolivia, it was not attempted again.

Although many of the Bolivian people may have been happy with their success of driving Aguas del Tunari out of their country, its removal caused many problems. The forcible removal of a transnational corporation from the country and the termination of a contract deterred foreign investors from entering Bolivia.¹²⁵ Foreign companies no longer wanted to take the chance of investing in the country, which hurt the Bolivian economy. Another problem resulting from the removal of Aguas del Tunari from the country was the creation of a disgruntled company. Aguas del Tunari wanted repayment for its large losses from taking the risk of investing in Bolivia only to be removed from the country. They decided to take action against Bolivia and filed a lawsuit, which demanded a 25 million dollar compensation.¹²⁶ The case against Bolivia was brought to the Tribunal at the International Centre for Settlement of Investment Disputes (ICSID) and resulted in Bolivia not having to pay a compensation to Aguas del Tunari.¹²⁷ As the poorest country in South America, Bolivia cannot afford to pay such a large compensation.

Even though some problems were created through the removal of Aguas del Tunari from the country, the privatization effort in Cochabamba caused an increase in the lack of access to safe drinking water. In Cochabamba, there were no successes with the access to safe drinking water through water privatization. The existing connected

¹²⁵ Naegele. 126.

¹²⁶ Petras and Veltmeyer. 187.

¹²⁷ Alexandre de. Gramant. After the Water War: The Battle for Jurisdiction in Aguas del Tunari, S.A. v. Republic of Bolivia. *Transnational Dispute Management*. 3.5 (2006). 1

households in Cochabamba decreased from 70 to 60 percent, with only 47,520 of the 300,000 planned new connections accomplished. The duration of availability of water was also a disappointment, with people only being able to use the unreliable water supply for four hours a day.¹²⁸ The decrease in water availability to the people of Cochabamba helped catapult the Water War of 2000 into affect. The termination of the water contract with Aguas del Tunari put an end to water privatization in Cochabamba.

The people of Bolivia had drastic reactions to their government selling and privatizing their water systems. Around the world, people believe that water is a birthright for all living creatures and that no one can own water.¹²⁹ The Bolivians did not think that any corporation or government had the right to privatize their water system. High tensions were created in the two cities where water was being privatized because the Bolivians could not afford to pay the increased water prices. As the terms of the water contracts for Cochabamba and La Paz/ El Alto began to come clear and the people realized that the contracts were created to benefit the water corporations and not the Bolivian people, tensions began to rise.

Ultimate Outcome

The ultimate outcome of water privatization in Bolivia is considered a failure because it resulted in the termination of the contracts with both water corporations and the removal of these corporations from the country. Although water privatization in La Paz/ El Alto did have some success with increasing the access to safe drinking water, the company was still forced out of the country after a few years. In the case of Cochabamba, Aguas del Tunari only managed to privatize the water system for a couple of months

¹²⁸ "Bolivia Water Management: A Tale of Three Cities." 2.

¹²⁹ Olivera and Lewis. 7.

before their contract was terminated. These two cases are both considered failures due to the popular protests that arose against water privatization and the water corporations, which led to their removal. Since the failure of water privatization in Cochabamba and La Paz/ El Alto, water privatization has not been reattempted.

Water privatization in La Paz/ El Alto and Cochabamba was a failure, even though during the years of privatization, there was some improvement. The coverage rates improved slightly in La Paz/ El Alto, but not in Cochabamba. The total improved drinking water access for urban areas went from 92 to 96 percent from 1990 to 2010 as more people began to move to the cities. The total improved drinking water access for rural areas went from 43 to 71 percent from 1990 to 2010. The total national improved water access went from 70 to 88 percent of the population from 1990 to 2010.¹³⁰ There were no benefits for the investors as they took a large risk and were removed from the country with heavy losses. There were also no benefits for the Bolivian government as Aguas del Tunari sued them for more money than they would be able to provide.

The Water War and its outcome had a political effect on Bolivia. After the popular mobilizations of the Bolivians, Bolivia has moved away from neoliberal privatization. In an attempt to stop the neoliberal policies in their country, the Bolivian people elected Evo Morales president in 2005. Since the beginning of his presidency, Evo Morales has reversed direction by nationalizing many natural resources including gas.¹³¹

To this day, Bolivia remains South America's poorest country. The World Bank has continued their loans to Bolivia after a reevaluation of their conditionality, which has undergone many changes including a decline in the number of conditions placed on each

¹³⁰ UNICEF and the WHO. "Progress on Drinking Water and Sanitation 2012 Update." UNICEF and the WHO, 2012: 39.

¹³¹ Haarstad and Andersson. 20.

loan.¹³² Although the World Bank continues their loans, Bolivia is still struggling. Providing water coverage is now back in the hands of the government. Even after the water privatization attempts, one third of Bolivians still lack access to safe drinking water and over 50 percent of Bolivians live below the poverty line.¹³³

¹³² Operations Policy and Country Services: World Bank. "Review of World Bank Conditionality." 2005.

V.
¹³³ Naegele.126.

Chapter 3: Chile: The Gradual Introduction of a Market-Driven System

The second case study used to determine the success of water privatization in Latin America is Chile. This country was chosen because of its positive experiences with water privatization. It resulted in an almost 100 percent water rate coverage in cities. It is a system that is still in place today and many organizations, such as the World Bank, consider it a successful case of water privatization.

Demographic Profile

Chile is an Andean country. The capital is Santiago, which is the largest city. Chile has approximately 17 million people, consisting of three main ethnic groups: white and white-Amerindian with 95.4%, Mapuche with 4% and other indigenous groups with 0.6%. Chile is considered one of the wealthier countries in Latin America with only 15.1% of the population below the poverty line. The World Bank considers Chile to be an upper-middle income country.¹³⁴ Chile is considered a stable, democratic nation and often fills regional and international leadership roles.¹³⁵

Chile is considered to have a large urban population, with 85% of the population or 16.3 million people living in cities.¹³⁶ Most Chileans have access to safe drinking water since most of the population lives in urban areas and 99% of the urban population has a drinking water supply. In the rural areas of Chile, it is harder for people to have access to safe drinking water. Only 75% of the rural concentrated population, which are

¹³⁴ The World Bank. "Data: Chile."

¹³⁵ CIA World Factbook.

¹³⁶ Harry Vanden and Gary Prevost. *Politics of Latin America: The Power Game*. (New York: Oxford University Press, 2009): 432.

groups of people too small to be considered a city, such as a small town, and a shocking 15% of the rural dispersed population, which are people who live outside of towns or cities, have a safe drinking water supply.¹³⁷

Political and Economic Context

The process of privatization in Chile began in 1974 after the coup against Salvador Allende, the socialist president from 1970 to 1973, who adopted a policy of nationalization. During the Allende years, 179 firms were nationalized.¹³⁸ The GDP of Chile plummeted during the rule of the Allende administration. In 1973, the Allende administration fell and the people of Chile were interested in promoting economic growth, causing a reevaluation of the nationalization movement. Augusto Pinochet became dictator of Chile after the fall of the Allende administration until 1990. During his dictatorship he promoted neoliberal policies, which included privatization.¹³⁹

In the 1980s, Latin America experienced a debt crisis, with Chile being one of the most affected countries. GDP during the 1980s decreased by 15%, the financial system of Chile failed due to the bankruptcy of the firms and banks, the unemployment rate increased to 33% and the savings of the middle class vanished.¹⁴⁰ The recession Chile experienced during the debt crisis was even worse than after the fall of the Allende government.¹⁴¹

Augusto Pinochet was still the dictator of Chile during the debt crisis. The economic problems that resulted from the debt crisis weakened his regime. In order to

¹³⁷ Economic Commission for Latin America and the Caribbean. 30.

¹³⁸ Alberto Chong and Florencio López-de-Silanes. *Privatization in Latin America: Myths and Reality*. (Washington, DC: World Bank and Stanford University Press, 2005): 197-199.

¹³⁹ S. Collier and W. Sater. *A History of Chile, 1808-1994*. (Cambridge: Cambridge University Press, 1996): 366.

¹⁴⁰ Vanden and Prevost. 441.

¹⁴¹ Collier and Sater. 370.

stay in power, Pinochet turned to the US trained neoliberal economists, also known as the “Chicago Boys,” for help. They thought that the development and economic growth of Chile was held back due to the state-interventionist tendency that drove policy in Chile since the 1920s.¹⁴² The “Chicago Boys” recommended privatization to promote economic growth through monetary stability, the reestablishment of a free market economy and the creation of an economy open to international competition and investment. Due to Pinochet’s strong support of the Chicago Boys philosophy, a powerful opposition movement grew, which led to mass mobilizations and a protest movement.¹⁴³

The privatization process in Chile is unique because it encompassed everything in the country from banks and farms to health insurance and electricity. Almost all of the banks, firms and farms that were obtained during the Allende administration were privatized in the years following the fall of the Allende government. Privatization was a major step in the economic liberalization process Chile was undergoing. Economic liberalization was a huge shift in policy for Chile. It represented a reversal of most of the policies Chile had followed since the 1940s, during which the state played a large role within public firms and acted as a regulator. Developing the private sector was considered the main step in the market economy shift.¹⁴⁴

The neoliberal program continued to be strongly promoted in Chile by the Pinochet government, which caused large-scale privatization to occur.¹⁴⁵ Privatization in Chile occurred in three stages over three decades. The first phase began in 1974 and ended in 1983, with 84 of the firms that were nationalized by the Allende government

¹⁴² Collier and Sater. 365.

¹⁴³ Vanden. 439-441.

¹⁴⁴ Chong and López-de-Silanes. 197-198

¹⁴⁵ Collier and Sater. 366.

becoming privatized. The second phase of privatization of the three phase privatization process occurred from 1984 to 1989 and was one of the most important phases because the telecommunications, electric power firms, steel firms and national Chilean Airline, LAN, were all privatized. By 1985, Chile began to see strong economic growth as a result of the neoliberal program. Privatization was a major contributor to the Chilean economic growth through balanced budgets and capital markets.¹⁴⁶

In Chile, by 1990, most of the formerly state-owned companies had been privatized. Chilean companies even began to invest in privatization in other South American countries including Argentina, Bolivia, Brazil, Peru and Colombia.¹⁴⁷ The neoliberal policies helped continue to combat the effects of the economic crisis, bringing inflation down and increasing GDP.¹⁴⁸

Approach to Water Privatization

The third and final phase of privatization was much slower for state owned enterprises. During the final phase, which occurred from 1990 to 2001, the state sold the three main water and sewerage companies.¹⁴⁹ The three main water and sanitation companies were SENDOS (Servicio Nacional de Obras Sanitarias), EMOS (Empresa Metropolitana de Obras Sanitarias) and ESVAL (Empresa Sanitaria de Valparaíso). They were privatized in the 1990's when democracy was restored in Chile after the fall of the Pinochet administration. Pinochet's military regime did not want to take the risk involved in privatizing the water and sanitation companies because they knew that the water rate would need to be raised significantly, which would have made their

¹⁴⁶ Chong and López-de-Silanes. 198-199.

¹⁴⁷ Economic Commission for Latin America and the Caribbean. 29.

¹⁴⁸ Collier and Sater. 367.

¹⁴⁹ Chong and López-de-Silanes. 198.

administration unpopular. In 1990, the new water pricing system was established, which raised rates an average of 90 percent between 1990 and 1994. By 1998, a large range in regional water rates existed from \$0.43 to \$1.21 per cubic meter. After raising water prices to make the regulatory framework of the water system stronger, the Chilean government decided the water system was ready to be privatized in 1998.¹⁵⁰ As of 2000, Chile has 922 cu km of total renewable water resources. The freshwater withdrawals for domestic, industrial and agricultural uses are 12.55 cu km/yr, segmented into 11% domestic, 25% industrial and 64% agricultural uses. The freshwater withdrawal per capita is 770 cu m/yr.¹⁵¹

Before the water systems in Chile were fully privatized during the third phase of privatization, a number of structural reforms occurred under the neoliberal policies. The first stage, from 1977 to 1988, involved the creation of a national agency known as SENDOS or Servicio Nacional de Obras Sanitarias. SENDOS was in charge of the production, commercial, regulatory and supervisory functions of the water sector.¹⁵² The Water Law of 1981 was created to “strengthen private property, increase private autonomy in water use and create free markets in water rights.”¹⁵³ The main goal was to strengthen private involvement and weaken state involvement in the Chilean water system.¹⁵⁴ Under the Chilean constitution, the private right over water grants possession to the holder.¹⁵⁵ This means that the holder is able to use the water in any way they want

¹⁵⁰ Chong and López-de-Silanes. 212-213.

¹⁵¹ CIA. United States of America. The Central Intelligence Agency. *The World Factbook: Chile*.

¹⁵² Gabriel Bitrán and Pamela Arellano. "Regulating Water Services: Sending the Right Signals to Utilities in Chile." *Public Policy for the Private Sector*. The World Bank Group: Private Sector Development Vice Presidency, 2005: 1.

¹⁵³ Carl J. Bauer. *Against the Current: Privatization, Water Markets, and the State in Chile*. (Boston: Kluwer Academic Publishers, 1998): 33.

¹⁵⁴ Bauer. 45.

¹⁵⁵ Economic Commission for Latin America and the Caribbean. 29.

including receiving its benefits and disposing of it. The Dirección General de Aguas (DGA) from the Ministerio de Obras Públicas (MOP) was created to issue and register water rights in Chile. The neoliberals fully adopted the new model of water privatization and the extreme conservatives completely opposed it.¹⁵⁶

The second stage of the reform of the water sector occurred from 1989-1998. It helped create a new model, designed to concentrate public spending on the parts of the water system that the private sector would not be interested in. From 1995 to 1999, Chile was one of the countries that received the most private investment from the World Bank in the water supply sector in comparison to other countries throughout the world.¹⁵⁷ The second stage was important for full privatization because it increased the role of the private sector in the water system.¹⁵⁸

The final stage began in 1999 and ended in 2004 with the full privatization of the main water and sanitation utilities, including SENDOS. During the final stage of the reform of the water sector, many of the largest transnational corporations were interested in investing in the Chilean water system including Suez Lyonnaise des Eaux, Thames Water and Anglian Water.¹⁵⁹ The Chilean government put its water system up for sale and Suez Lyonnaise des Eaux became the transnational corporation that was ultimately in charge of most of the Chilean water system. The World Bank decreased the risk in investing in the water system of Chile by forcing Chile to guarantee a profit margin of 33%, no matter the actual water systems profit.¹⁶⁰ There are numerous types of contracts

¹⁵⁶ Bauer. 33.

¹⁵⁷ Naren Prasad. "Privatisation of Water: A Historical Perspective." *Law Environment and Development Journal*. 3:2. (2007): 228.

¹⁵⁸ Bitrán and Arellano. 1.

¹⁵⁹ *Ibid.* 1-2.

¹⁶⁰ Naegele. 110.

that can be chosen for water privatization with transnational corporations including concession, service, lease and management. The Chilean government decided to create a service contract with Suez Lyonnaise des Eaux for the privatization of the Chilean water system.¹⁶¹

The process of the Chilean water reform lasted approximately three decades and occurred in three stages. During the decades during the water reform, Chile experienced a large transformation in its water sector. Such a large transformation occurred due to the substantial amount of investment in the country from foreign enterprises. From the period of 1990 to 2001, Chile had eight water and sewerage projects developed throughout the country with a total investment of 4.2 billion dollars.¹⁶² These projects were fundamental in the privatization process because it helped create good infrastructure.

Public Response

In general, the public response to privatization was positive. After the Allende administration and the recession of 1975 to 1976, it was evident that the neoliberal policies were helping promote economic growth. The economy was beginning to come out of its recession. Inflation fell and GDP rose with the help of privatization in Chile.¹⁶³

However, water privatization has also had some negative effects. As water privatization was occurring, the Chilean tariff law for water and sanitation services was created to help set prices. Water privatization in conjunction with the tariff law caused a huge increase in the average real tariff, which tripled from 1989 to 2002.¹⁶⁴ The high

¹⁶¹ Clarke, George, Katrina Kosec, and Scott Wallsten. "Has Private Participation in Water and Sewerage Improved Coverage? Empirical Evidence from Latin America." *Journal of International Development* 21.3 (2009): 333.

¹⁶² Jessica Budds and Gordon McGranahan. "Are the Debates on Water Privatization Missing the Point? Experiences in Africa, Asia and Latin America." *Environment and Urbanization*. 15.87 (2003): 103.

¹⁶³ Collier and Sater. 369.

¹⁶⁴ Bitrán and Arellano. 2.

water rates in Chile are still a problem today. The Chilean population did not like the dramatic increase in prices. Due to privatization, Chile has the highest water rates in all of Latin America. The high water rates have caused a significant drop in water consumption rates because the cost of water is too high to use the same amount of water as before the privatization process began.¹⁶⁵

The high increases in water rates have also greatly affected the indigenous populations of Chile, such as the Mapuche people. The Mapuche are the largest indigenous group in Chile, making up about 4% of the Chilean population. They live mostly in the southern cone of Chile and Santiago. They cannot afford to pay the high water prices and the Chilean government is continuously reducing the water supply they are given.¹⁶⁶

In general, the Chilean population has had a positive reaction in regards to privatization and has supported it over three decades in order to promote economic growth. Unlike the general privatization in Chile, the extreme increase in water rates following the privatization of water has not had a positive response from the Chilean people. This is mostly because the Chilean population now has to use considerably less water than they used to use before water privatization.¹⁶⁷

Ultimate Outcome

Despite the negative aspects, in general, the World Bank considers water privatization in Chile a success. Water privatization in Chile is measured in four categories: an increase in coverage, the water rates, the benefits for investors and the

¹⁶⁵ Sara Larrain and Colombina Schaeffer. "Conflicts over Water in Chile: Between Human Rights and Market Rules." *Chile Sostenible*. Santiago, Chile (2010): 4.

¹⁶⁶ Minority Rights Group International. *State of the World's Minorities and Indigenous Peoples 2012 – Chile*. 28 June 2012.

¹⁶⁷ Larrain and Schaeffer. 4.

benefits in savings for the Chilean government. Through water privatization, safe access to the water system has increased.¹⁶⁸ In Chile, there was a large increase in the improved coverage of drinking water from 1990 to 2010 in the rural population. The drinking coverage improved from 48 to 75 percent in rural areas, with a national improvement of 90 to 96 percent from 1990 to 2010.¹⁶⁹ In the urban areas, the drinking water coverage stayed the same at 99 percent. Another category that exhibits the success of water privatization is that the transnational corporations and other investors have maintained stable profits throughout privatization. Through the help of private corporations involvement in the water system, the Chilean government has saved billions in investment and development costs in an effort to reach full coverage. The category that was unsuccessful during water privatization was the water rates. Privatization has caused the water rates to increase dramatically, forcing the Chilean population to pay much higher rates.¹⁷⁰ There were not strong protests against water privatization in Chile because Chile has a higher average income. This means that although the water prices were raised, Chileans were still able to afford to pay for water.

There are many reasons why people believe that water privatization was positive for Chile, as opposed to the rest of Latin America. One reason is because it increased economic growth. Water privatization in Chile was a slow methodical process that took decades with stages of reform before privatization.¹⁷¹ Many people and organizations, including the World Bank, have used the Chilean model for water privatization as an

¹⁶⁸ Bitrán and Arellano. 1.

¹⁶⁹ UNICEF and the WHO. "Progress on Drinking Water and Sanitation 2012 Update." UNICEF and the WHO, 2012: 41.

¹⁷⁰ Bitrán and Arellano. 1.

¹⁷¹ Melissa H. Birch and Jerry Haar. *The Impact of Privatization in the Americas*. (University of Miami: North-South Center Press, 2000): 13.

example to promote privatization in other developing countries as a method to help achieve economic growth. The Chilean water system is still in private hands today and has increased coverage to the majority of the country.

Chapter 4: Peru: Half-Hearted Reform Lead to a Mixed Result

The third case study chosen to assess the success of water privatization is Peru. This country had a drawn out experience with water privatization, resulting in only a partial privatization in some Peruvian cities. Water privatization in Peru took place during three presidencies, which allowed the people a longer chance to get used to the idea, resulting in less riots and social upheaval.

Demographic Profile

Peru is an Andean country. Its capital is Lima, which is also its largest city with 7.6 million inhabitants. Peru has approximately 29.5 million inhabitants, consisting of four main ethnic groups: Amerindian with 45%, mestizo with 37%, white with 15% and black, Japanese, Chinese, and other with 3%. Peru has a large number of social and economic problems such as high levels of inequality and poverty, poor infrastructure, and a growing population. The population of Peru went from 21.9 million inhabitants in 1990 to 29.5 million inhabitants in 2012. In Peru, about 31.3% of the population are living below the poverty line.¹⁷² The World Bank considers Peru to be an upper-middle income country.¹⁷³

Political and Economic Context

Economic crises and increasing financial problems in Peru led to resounding support for privatization. From 1968 to 1980, a military government was in power in Peru, which focused on the nationalization of many state owned enterprises. The military

¹⁷² CIA World Factbook. CIA Agency.

¹⁷³ The World Bank. "Data: Peru."

regime created a Five-Year Economic Plan designed to get national control over the economy. This plan was achieved in two stages, which included a land-reform program and the growth of the state.¹⁷⁴ In the mid-1970s, Peru was beginning to feel the effects of its financial problems, which included high inflation rates, a low GDP, rising terrorism and governmental corruption. The escalation of terrorism and governmental corruption during this time was due to the lack of action by the Peruvian government and the terrorists being funded by the coca growers.¹⁷⁵ The 1980 Latin American debt crisis and natural disasters, including the shift of the “El Niño” ocean current, ended all hope for economic growth at the time in Peru. A populist president, Alan García, was elected in 1985 and many Peruvians saw him as their savior. He financed a boom in consumption and delayed inflation. Unfortunately, his efforts did not last long and Peru began to sink into greater despair. The end of García’s presidency was marked with “government disorganization, corruption and escalating terrorism.”¹⁷⁶ After García’s presidency, Peru was in dire need of economic change. During this time, many Peruvians believed that state enterprises were corrupt, which drove them to favor privatization to promote economic growth.¹⁷⁷ Due to the governmental corruption and increasing terrorism during the military regime and the García administration, actual privatization came later in Peru than in the rest of Latin America, even though the preparatory steps for water privatization came earlier.

¹⁷⁴ Peter Flindell Klarén. *Peru: Society and Nationhood in the Andes*. (Oxford: Oxford University Press, 2000): 341-343.

¹⁷⁵ Melissa H. Birch and Jerry Haar. *The Impact of Privatization in the Americas*. (University of Miami: North-South Center Press, 2000): 100.

¹⁷⁶ Birch and Haar. 100.

¹⁷⁷ *Ibid.* 99-100.

In 1990, Alberto Fujimori was elected president and began the introduction of neoliberal policies in Peru.¹⁷⁸ Since 1990, the government of Peru has been promoting privatization as a major component of market-based reforms. The goal of the reform was to move all state-owned companies to the private sector by 2000.¹⁷⁹ Legislative Decree number 674 of September 1991 declared that the support of private investment was a national interest. Carlos Montoya, who returned to Peru from a post with the World Bank, led the Comisión de Promoción de la Inversión Privada (COPRI), which was developed to manage privatization in Peru.¹⁸⁰

In 1992, President Alberto Fujimori assumed power over the congress and judiciary in an autogolpe. The increase in the power of Fujimori wielded a larger introduction of neoliberalism to the economy.¹⁸¹ Privatization allowed transnational corporations to bid on the country's resources, including the water system. Although the government of Peru has been supportive of privatization, it was a process that was slow to begin. By 1996, 70 percent of the privatization process in Peru was completed and in 1997 nearly all of the state owned enterprises in Peru were privatized, with the exception of the water supply.¹⁸² Some of the major industries to be privatized by 1997 include electricity, telephones and banks.¹⁸³

By 2000, formal democracy had returned to Peru. In 2001, Alejandro Toledo was elected president of Peru. He was the first indigenous president to be elected democratically. During his rule there were many economic problems, which caused strain

¹⁷⁸ Antonio Augusto Rossotto Ioris. "The Neoliberalization of Water in Lima, Peru." *Political Geography* 31.5 (2012): 270.

¹⁷⁹ Economic Commission for Latin America and the Caribbean. 48.

¹⁸⁰ Birch and Haar. 102.

¹⁸¹ Ioris. 270.

¹⁸² Birch and Haar. 102-103.

¹⁸³ Maximo Torero. "Peruvian Privatization: Impacts on Firm Performance." "What are the Costs and Benefits of Privatization in Latin America." Inter-American Development Bank Research Department: 5.

on his term.¹⁸⁴ He also attempted to continue the privatization process in Peru with the Inter-American Development Bank (IDB). Toledo wanted to work together with the IDB in order to receive loans for privatization.¹⁸⁵ In 2006, García was reelected president and strongly promoted water privatization.

Approach to Water Privatization

The water sector in Peru was the last to be tackled during privatization as in other Latin American countries. Water privatization occurred slowly in Peru. From the beginning, the Peruvian government was attempting to promote water privatization through the creation of specific legislation. Legislative Decree number 697 of November 1991 also known as the “Ley de Promoción a la Inversión Privada en el Campo del Saneamiento” was created specifically to promote private participation in water supply and sewerage.¹⁸⁶ Although privatization became a policy, it did not become relevant until nearly a decade later.

Water privatization in Peru was very different than the privatization of water in other Latin American countries. It was not as visible as in other countries such as Bolivia and Chile because it was more “sporadic and localized,” which occurred through the “adoption of a variety of business models.”¹⁸⁷ The World Bank and IMF in 1995 supported water privatization in Peru because they were concerned that the Peruvian government was not supplying adequate water to its people.¹⁸⁸ In order to increase safe

¹⁸⁴ Ioris. 270.

¹⁸⁵ Enrique Buchichio. “To Defend Water is to Defend Life.” Choike. (Project of the Instituto del Tercer Mundo, NGO in Consultative Status with the Economic and Social Council of the United Nations).

¹⁸⁶ Economic Commission for Latin America and the Caribbean. 48.

¹⁸⁷ Ioris. 266.

¹⁸⁸ Paul Trawick. “Against the Privatization of Water: An Indigenous Model for Improving Existing Laws and Successfully Governing the Commons.” *World Development* 31.6 (2003): 977. Political Science Complete.

access to drinking water, the World Bank made the privatization of its water systems one of its conditions for loans.¹⁸⁹

In Peru, the provincial municipalities were in charge of the provision of the water supply. This means that each city is in charge of its water system and the supply of water to its people. In order to increase improvements of the water systems, private or mixed companies are responsible for service provision under contracts in the form of concessions, which cannot be for less than 15 years or more than 60 years.¹⁹⁰

The only exception to this distribution model is the Empresa de Servicios de Agua Potable y Alcantarillado de Lima (SEDAPAL), which is responsible for the Lima and Callao provinces. SEDAPAL has remained in the hands of the state and is the largest water supply system in Peru. The water supply system of SEDAPAL was only designed to serve approximately two million people.¹⁹¹ Lima now holds nearly nine million people and Callao contains a population of about 813,260 people, which has caused a lot of stress on the water supply system.¹⁹² The water system in Lima has failed to provide safe water supply due its infrastructure deterioration, the large increase in population and the lack of investment needed to improve the water system.¹⁹³ Lima was in great need of investment to help improve the water system because about 8.5% of the population relies on water trucks, about 3.9% of the population relies on public fountains for water and

¹⁸⁹ Sara Grusky and Maj Fill-Flynn. "Will the World Bank Back Down?: Water Privatization in a Climate of Global Protests." *Public Citizen's Water for all Program*. 2004. 14.

¹⁹⁰ Economic Commission for Latin America and the Caribbean. 50.

¹⁹¹ Birch and Haar. 104.

¹⁹² Ioris. 266.

¹⁹³ World Bank. "Implementation Completion and Results Report on a Loan in the Amount of US\$150 Million to the Republic of Peru for the Lima Water Rehabilitation and Management Report." *Sustainable development: Bolivia, Ecuador, Peru and Venezuela Country Management Unit; Latin America and Caribbean Region*. 2009: 1.

about 4.3% of the population gets water from storage tanks.¹⁹⁴ The water system in Lima was often only available in certain parts of the city and only for a few hours a day.

There was an attempt to privatize the water system of Lima, Peru, which represents a large part of the population in the country, over about two decades. The privatization process occurred in three components. Alberto Fujimori promoted the first two components in the 1990s, focusing technical and economic goals, in order to increase the involvement of Peru in the global economy. The technical goals included the creation of better water management techniques and an increase in the availability opportunity for private investors.¹⁹⁵ The economic goals were created to promote water as an economic good that had a monetary value. Alan García, who was reelected for a second term after Toledo in 2006, pursued two components, the economic and political goals, which attracted the private corporations.¹⁹⁶ The political goals intent was to prevent unrest within the country and promote water privatization without opposition and protests. The three components were important in the promotion of water privatization in Lima.

In order to promote privatization of the water system in Lima, Fujimori passed reforms to reorganize SEDAPAL.¹⁹⁷ As part of the new reforms SUNASS, National Sanitation Service Superintendence, was created in 1992 in an effort to make SEDAPAL more available for foreign investment. Fujimori created water tariffs, reduced labor costs and attracted more investments, which benefited from a World Bank loan of US\$ 600 million.¹⁹⁸ The structural adjustment of raising the water tariffs resulted in increasing

¹⁹⁴ Ioris. 266.

¹⁹⁵ Ibid. 268.

¹⁹⁶ Ibid. 277.

¹⁹⁷ Ioris. 271.

¹⁹⁸ Ibid. 266.

water rates from US\$ 0.10 to US\$ 0.28 per cubic meter in Lima.¹⁹⁹ The average rate for drinking water in urban areas of Peru is \$0.43 per cubic meter.²⁰⁰ The goal of the loan from the World Bank was to help with the image of water to make water privatization more appealing to the transnational corporations that would bid on the system. With the adjustments to SEDAPAL many corporations were interested in bidding on the water system of Lima. In 1994, the three corporations that articulated their interests in bidding were Canal de Isabel II, Compagnie Generale des Eaux and Lyonnaise des Eaux.

Although the Peruvian government expressed its desire to allow the privatization of SEDAPAL to occur, there were many delays and eventually in 1997 there was an official cancellation. After the failure of the privatization, the Peruvian government knew it needed to do something to help improve the water system. The administration of Fujimori led a program of investment estimated at around US\$ 2.44 billion to help create better management, technology and construction for the water system of Lima.²⁰¹ This program led by Fujimori effectively halted the need for water privatization in Lima during the 1990s.

As of 2000, Peru has 1,193 cu km of total renewable water resources. The freshwater withdrawals for domestic, industrial and agricultural uses are 20.13 cu km/yr, segmented into 8% domestic, 10% industrial and 82% agricultural uses. The freshwater withdrawal per capita is 720 cu m/yr.²⁰² The Peruvian government was once again trying to introduce water privatization in Lima. The neoliberalization of water in Peru was

¹⁹⁹ World Bank. "Implementation Completion and Results Report on a Loan in the Amount of US\$150 Million to the Republic of Peru for the Lima Water Rehabilitation and Management Report." 1.

²⁰⁰ Else Chanduví Jaña. "Water: A Human Right under Threat." *LatinAmerica Press* 39.20 (2007).

²⁰¹ Ibid. 271.

²⁰² CIA. United States of America. The Central Intelligence Agency. *The World Factbook: Peru*.

supported by many organizations including international cooperation agencies, governmental donors and multilateral banks.²⁰³

Instead of privatizing the entire water supply system, Peru decided to try partial privatization. A BOT, build-operate-transfer, contract was created for the Chillón river basin.²⁰⁴ A BOT project allows the company who privatized the water system to receive its income by charging the government, rather than the consumers.²⁰⁵ The US\$ 250 million contract was for the production of drinking water, which would be provided over 27 years by an Italian operator. The goal of the contract was to produce about 5% of Lima's water. The people in the Chillón catchment resented the private company because there was often a reduction of water flow.²⁰⁶ Although there were many problems with the partial privatization experiment in the Chillón Catchment, newly reelected president Alan García, recognized the opportunities of having private partnerships with the water system and used the slogan 'without water there is no democracy' to promote his campaign for the presidency in 2006.²⁰⁷

In 2007, after the termination of water privatization contracts, the administration of García created a program known as 'Water for All', or 'agua para todos' (APT), which contained over three hundred water projects, with 150 projects just in Lima. This program allowed foreign companies, especially American, Brazilian, Chilean and Spanish corporations, to become involved in the water system of Lima due to the change

²⁰³ Ioris. 272.

²⁰⁴ Torero. 6.

²⁰⁵ World Bank. "Concessions, Build-Operate-Transfer (BOT) and Design-Build-Operate (DBO) Projects, PPP in Infrastructure Resource Center for Contracts, Laws and Regulation.

²⁰⁶ Ioris. 272.

²⁰⁷ Ibid. 272.

in the investment process.²⁰⁸ ‘Water for All’ was a program that promoted partial privatization through the inclusion of international corporations.

Water privatization was also attempted in other areas of Peru, such as Pacasmayo, a province in Peru. The drinking water services and sewerage of Pacasmayo were sold to Nordwasser SAC in 2002 in a sixty-year contract. By 2004, the contract was terminated by the government and the water system was returned to the municipality. According to Luis Isarra Delgado, Secretary General of the National Federation of Water and Sewerage Workers of Peru (FENTAP), the contract failed because it worsened services and failed to fulfill the contract. The concession did not bring in the money necessary to fix the services, which were worsened through the concession.²⁰⁹

Public Response

While initially in favor of privatization, the people of Peru have grown to oppose the privatization policies. Tensions began to increase within the working class against the neoliberal reforms of the 1990s. The Peruvians were unhappy with the privatization policies because of the increasing tariffs that came with it that were needed to interest foreign investors. The failure of the privatization of SEDAPAL in 1994 was due to opposition by the people of Lima calling on the government to end privatization. The Fujimori government could not find a way to legitimize water privatization in the eyes of the people.²¹⁰ The Peruvians have seen water privatization as an attack on their sovereignty and their human rights.

²⁰⁸ Ioris. 273.

²⁰⁹ Enrique Buchichio. “To Defend Water is to Defend Life.” Choike. (Project of the Instituto del Tercer Mundo, NGO in Consultative Status with the Economic and Social Council of the United Nations).

²¹⁰ Ioris. 271.

Since the failure of the full privatization of SEDAPAL, Peru has had increasing problems with the deteriorating water system. Therefore, the Peruvian government has focused on the partial privatization of the water systems. The partial privatization process has still caused a dramatic increase in water prices for Peruvians. From 2006 to 2008, water prices increased 43.8%, which ended in discontent from the people of Lima. Since the creation of the 'Water for All' program, which brought foreign investment, there has been an increase in vandalism and water meter theft, but there have not been many protests against water privatization in Peru.²¹¹

The indigenous people of Peru have been very disappointed with the privatization of water because they have lost many of the rights they had before privatization. In order to prevent massive upheavals, the Peruvian government had been taking water from indigenous communities to give to other more populated areas of Peru. In 2007, the indigenous community of Carhuancho brought a case against the Peruvian government to the Latin American Water Tribunal. The Latin American Water Tribunal was created to protect the human right to water. The case was brought against the Peruvian government because they transferred water from many of the lagoons in the indigenous community without compensation or consultation. The tribunal ruled against the Peruvian government and recommended a reversal of the project.²¹² Although the indigenous community won the case, there are many other cases where the indigenous communities lost their rights to water due to the need of the government for access to more water.

Ultimate Outcome

²¹¹ Ioris. 274.

²¹² Oriol Miroso and Leila M. Harris. "Human Right to Water: Contemporary Challenges and Contours Of a Global Debate." *Antipode* 44.3 (2012): 941-942.

The overall outcome of water privatization in Lima has both positives and negatives, if we focus on the increase in coverage and quality of water sources, the water rates, the benefits for investors and the savings for the Peruvian government. The total improved drinking water access for urban areas went from 88 to 91 percent from 1990 to 2010. The total improved drinking water access for rural areas went from 45 to 65 percent from 1990 to 2010. The total national improved drinking water access went from 75 to 85 percent from 1990 to 2010.²¹³ For Lima, water production has increased by 3.1% from 2001 to 2010. One of the main problems with the water system in Lima was that the foreign investors focused more on the expansion of the water system rather than the quality and affordability of the water.²¹⁴ Although the safe water access levels in Peru are still low, they did increase with the introduction of water privatization. The water rates in Peru increased dramatically to a point where people could barely afford to pay for water. Peru has turned only recently toward partial water privatization rather than full privatization, which did not seem to work in the country. Savings for the Peruvian government only materialized because the government had to put a substantial amount of money into the water systems because full privatization failed. Water privatization ended in Peru in 2006 and the country is still facing problems with its water system today.

²¹³ UNICEF and the WHO. "Progress on Drinking Water and Sanitation 2012 Update." UNICEF and the WHO, 2012. 41.

²¹⁴ Ioris. 274.

Chapter 5: Comparing the Three Case Studies

The experiences that Bolivia, Chile and Peru had with water privatization differ, but they are also similar in many ways. In many situations, two of the case studies are similar to each other, while one differs greatly. For example, Bolivia and Peru both have large indigenous populations, while Chile only has a small one. Also, water privatization in Peru and Chile was long and drawn out over decades, while the attempt at water privatization in Bolivia lasted about a year. In other situations, all three case studies are similar. Bolivia, Peru and Chile all experienced a large increase in water prices after water privatization was attempted. The three case studies are similar in some respects, but different in the majority of their experiences with water privatization.

The three countries are compared in five dimensions, which are the demographic profile, the political and economic context, the approach to water privatization, the public response and the ultimate outcome. The demographic profile is the background information for each of the countries where water privatization was attempted. The political and economic context is a political and economic narrative explaining who led water privatization. The approach to water privatization is to whom the water system was sold and how the country prepared for water privatization, such as through reforms. The public response is the negative or positive reaction of the people about water privatization. The ultimate outcome is how the country has changed since the implementation of water privatization.

Each of the five dimensions builds on each other, creating a path dependency. This means that each dimension acts as the causal mechanism for the next. The urbanization movement and population growth caused there to be huge increases in the number of people in the cities. This put pressure on the water systems, which were not built to sustain large populations. The economic situation in the three countries caused them to turn towards neoliberal policies, including privatization. Bolivia, Chile and Peru focused on the neoliberal policies in order to save them from the economic recession they were in. The World Bank fully supported the neoliberal policies and thought that water privatization would improve the economic situations of developing countries. The countries privatized many sectors before water such as gas and electricity. The water systems were typically the last sector to be privatized due to its controversial nature, which created large opposition.

The demographic profile highlights the background information of each country, which includes population growth and the economic situation. There was a large population growth in Latin America from the mid-1900s to 2010. The countries heavily urbanized during this time. Urbanization facilitated water privatization by increasing the number of people in the cities, which increased the pressure on the water systems. The water systems were built for smaller populations, which caused many problems with access and created a push towards privatization.

Peru has the largest population of the three countries with about 29.5 million people compared to Chile with 17 million people and Bolivia with 10 million people. Although Peru has the biggest population, Bolivia had the largest population growth. From 1990 to 2010 the population grew by 49.3%. The population growth of Chile and

Peru from 1990 to 2010 was considerably less than in Bolivia. Chile grew by 29.8% from 1990 to 2010 and Peru grew by 34.7% from 1990 to 2010. Although Bolivia had the largest population growth, the three countries all experienced a large population growth during this time. Of the three countries, Chile is considered the most urbanized with approximately 89% of the population living in cities. Chile is followed by Peru, which has an urban population of about 77%. Bolivia has the smallest percentage of people living in urban areas with 67%. The percentages show the rural-urban divide of the three countries. In Chile almost the entire population lives in the cities, which differs greatly from Bolivia, which has a much larger rural population. Many people moved from rural areas to cities because they realized there were more opportunities for people who live in cities to make money. Urbanization in Latin America was fast and unplanned, which resulted in the creation of shantytowns. There was not enough room for the sudden wave of people into the cities causing many of the poorer people to live on the outskirts of the city in houses made of any material they could find including plywood, metal or cardboard. The increase of the populations in the cities of these three countries promoted water privatization as a solution to expand the water system to reach more people because the system was not able to supply water to growing populations.²¹⁵

Many international organizations put pressure on poor countries because they needed economic growth to stimulate their countries. These organizations were more likely to push harder on less developed countries because they needed a boost.²¹⁶ The poverty levels in the three countries played a major role in water privatization due to the

²¹⁵ Dennis Rodgers, Jo Beall, and Ravi Kanbur. "Latin American Urban Development into the 21st Century: Towards a Renewed Perspective on the City." *United Nations University- World Institute for Development Economics Research*. (2011).

²¹⁶ Bruno Gurtner. "The Financial and Economic Crisis and Developing Countries." *International Development Policy: The Financial and Economic Crisis and Developing Countries*. (2010): 189-213.

high pressure international organization put on poor countries. Bolivia has the highest percentage of people below the poverty line of the three countries with over half of its population below the poverty line at 51%. This percentage is much higher than in both Peru and Chile. In Peru about 31% of people are below the poverty line. Chile has the lowest percentage of people below the poverty line with only 15% of its population below the poverty line. The percentages of people below the poverty line show that there is a huge variation in the poverty levels of the three countries, which is important because international organizations put more pressure on Bolivia to privatize than Chile. The Human Development Index also shows the distinction of development levels between the three countries. Bolivia is also ranked the lowest of the three countries in the Human Development Index at 108, as seen in Table 1, which is considered medium human development. Peru is ranked 77, which is considered high human development and Chile is ranked 40, which is considered very high human development. Of the three countries, Bolivia is considered the poorest and Chile the wealthiest. The higher poverty in Bolivia means that it had a worse water distribution system before privatization than Chile or Peru, which forced it to accept disadvantageous contracts.

Table 1: Human Development Indicators for Bolivia, Chile and Peru

	Bolivia	Chile	Peru
Human Development Index Ranking (2012)	108	40	77
Income: GNI per capita in PPP terms (constant 2005 international \$)	4,444	14,987	9,306
Poverty (MPI: Multidimensional Poverty Index (%))	0.089	n.a	0.066
Human Development Index 1980	0.489	0.638	0.580
Human Development Index 1990	0.557	0.702	0.623
Human Development Index 2000	0.620	0.759	0.679

²¹⁷Source: UNDP International Human Development Indicators

The fast increase in population growth and the poverty levels in the three countries prompted the political and economic context of the countries. The political moments of the three countries were important to the reactions of water privatization in each of the three countries. Bolivia has experienced much instability during its history. The government of Bolivia changes often and the country has continued to face many economic problems. This differs from Chile and Peru, which have enjoyed a certain degree of stability in comparison to Bolivia. Chile is considered the most stable of the three countries, which explains the lack of protests within the country during water privatization.

²¹⁷ UNDP. International Human Development Indicators. *Human Development Reports* (2012). <http://hdr.undp.org/en/statistics/>

Bolivia, Chile and Peru all underwent nationalization of public utilities and some industries, which caused economic problems in the 1980s. Chile was the first of the three countries that underwent nationalization, which occurred in 1970. Peru began its nationalization process slightly later than Chile in the late 1970s and early 1980s. Bolivia was the last of the three countries to begin nationalization, which occurred in the early 1980s. All three countries underwent a nationalization movement, which was followed by a reversal of policies and a privatization movement.

Chile was the first of the three countries to undergo privatization in its country in 1974. It is often seen as a testing ground for the ideas that later made up the Washington Consensus. Since Chile had already begun to privatize sectors, the 1980 debt crisis solidified the implementation of the neoliberal policies in the country in an attempt to promote economic growth. The economic problems caused by the 1980 debt crisis forced Bolivia and Peru to turn towards other options, which led to the promotion of neoliberal policies and privatization. In Bolivia and Peru, privatization did not occur until the 1990s, which was over a decade later than in Chile. The World Bank and IMF played a large role in Bolivia and Peru because they strongly encouraged privatization as a solution to the economic problems of both countries. Since Bolivia is one of the poorest countries in Latin America it could not afford to reject the recommendations of the World Bank and IMF and lose its loans, which pushed it strongly towards privatization. The process of privatization was generally lengthy and typically the water system was the last sector to be privatized because water is necessary to sustain life. Many people view the privatization of water as an attack on their human rights because water is considered a basic need, which is why it was considered controversial to privatize.

Table 2: Amount of water and its uses for Bolivia, Chile and Peru in 2000

	Bolivia	Chile	Peru
Total Renewable Water Resources	622.5 cu km	922 cu km	1,193 cu km
Freshwater Withdrawals for domestic, industrial and agricultural uses	1.44 cu km/yr (segmented into 13% domestic, 7% industrial, 81% agricultural)	12.55 cu km/yr (segmented into 11% domestic, 25% industrial, 64% agricultural)	20.13 cu km/yr (segmented into 8% domestic, 10% industrial, 82% agricultural)
Freshwater Withdrawal per capita	157 cu m/yr	770 cu m/yr	720 cu m/yr

Source: CIA World Factbook

The amount of water and its uses for agricultural, industrial and domestic purposes in each of the three countries are important for water privatization. Peru has the most total renewable water resources with 1,193 cu km of total water and Bolivia has the least total renewable water resources with 622.5 cu km of total water. Although Peru has the most total renewable water resources, it dedicates the least percentage of the three case studies for domestic purposes or household consumption, with only 8% of the freshwater withdrawals of 20.13 cu km/yr, which is the total of agricultural, industrial and domestic withdrawals per year. This differs from Bolivia, which dedicates the highest percentage of freshwater of the three countries for domestic purposes or household consumption, with 13% of the freshwater withdrawals of 1.44 cu km/yr. In all three countries the majority of its freshwater withdrawals go to agriculture, but Chile also has a large percentage that goes towards industrial purposes, with 25% of the freshwater withdrawals of 12.55 cu km/yr. Chile and Peru both share a similar freshwater

withdrawal per capita with Chile withdrawing 770 cu m/yr and Peru withdrawing 720 cu m/yr. Although they share a similar consumption of water, privatization in Chile flourished and in Peru resulted in termination. The amount of water dedicated to domestic purposes or household consumption is important for water privatization and the distribution of water.

The approach to water privatization was formulated from the political and economic contexts of the three countries due to the economic crises in the countries. In all three countries, reforms had to be passed in order to make water privatization more appealing for transnational corporations to want to bid on their water systems. In Bolivia, Law 2029 was passed, which created the most hardships for the people of the three countries. The goals of Law 2029 were different from the laws in the other countries for numerous reasons. One reason was that it removed the guarantee that water would be delivered to rural areas, which the Bolivian people considered a right of the people. Another reason it was different is because it stated that people could not collect their own rainwater. This caused an uproar in Bolivia because many people in rural areas did not have wells and the only way they were able to get water was by collecting it from the rain. Law 2029 was different from the laws in the other two countries because it changed the way water was viewed by the government and it was no longer considered a right of the people. The implementation of this law put a lot of strain on the country and caused Bolivians to strongly reject water privatization.

In Chile and Peru the reforms that were passed were similar in their promotion of water privatization. They differed from in Bolivia because they did not create such extreme hardships, like prohibiting the collection of rainwater or the use of wells. In

Chile, the Water Law of 1981 was created to promote private participation in the water system by strengthening private property and weakening state involvement. This law was unique because it was a bold law that made Chile turn to a free market approach in relation to its water. In Peru, Legislative Decree number 697 was created to make the water system more appealing to the private sector and encourage them to bid on it. This decree encouraged private participation by removing the monopoly the public sector had on the water system. Although the reforms in Chile and Peru promoted private participation, they did not give as much power to the transnational corporations as in Bolivia. Bolivia, Chile and Peru all had to pass legislation on water to promote water privatization and to get transnational corporations interested in bidding on its water systems. The legislation passed in Bolivia changed the state promise of water, which was viewed as a right. The legislation passed in Chile and Peru focused on promoting private participation in the water systems.

The experiences the three countries had with the approach to water privatization influenced the public response and ultimate outcome. In Bolivia, water privatization occurred in two cities, La Paz and Cochabamba. In both cities, the privatization process did not last long and the people revolted against the rising water prices, which led to the removal of the transnational corporations from the cities. In Chile, water privatization occurred throughout the entire country in a lengthy process that took about twenty-five years from 1977 to 2001. The water system in Chile remains private today. In Peru, water privatization was “sporadic and localized.”²¹⁸ One of the cities where water privatization was attempted is Lima, the largest city in Peru. The water privatization process in Lima took about two decades and occurred under numerous presidents. In the end, full

²¹⁸ Ioris. 266.

privatization did not work in Lima, but partial privatization did. A form of water privatization was possible in Lima due to its lengthy process, allowing the people to become adjusted to the idea of water privatization. In other areas of Peru, such as the Pacasmayo province, water privatization did not work. This is a rural area where privatization was attempted quickly. Water privatization was not viewed positively by the people and was removed from the area.

Bolivia, Chile and Peru all had distinctive experiences with their approach to water privatization. In Bolivia, water privatization was a quick attempt in two cities and failed due to the revolt of the people. Bolivia differed from Peru and Chile in the amount of time dedicated to water privatization. It was hastily executed and poorly prepared. Although Chile and Peru both faced economic problems around the time of privatization, less aggressive action was taken by their governments towards water privatization than in Bolivia because they had less pressure from international organizations such as the World Bank. This allowed them to be able to privatize over a longer period of time making privatization more likely to work. In Chile, water privatization was a lengthy process that occurred for about three decades throughout the entire country and is still in place today. It was a drawn out process that took decades of preparation. In Peru, water privatization was attempted over two decades in different cities, which resulted in the partial privatization of one city and the termination of a contract in another province. In Lima, the water privatization was a long process, but in Pacasmayo water privatization was a quick, poorly prepared attempt.

The unique approaches to water privatization led to different reactions by the people of each country. In all three countries, the cost of water was raised as a

consequence of the transnational corporations privatizing the water systems. This resulted in strong reactions from the people. Bolivia was the least developed of the three countries, which caused a need for strong reforms to increase water access. In Bolivia, the people reacted the strongest because it is a poorer country with higher poverty levels. The people of Cochabamba and La Paz/El Alto could not afford to pay for water with the increased costs. Water privatization was attempted quickly in Bolivia, which never allowed the people the opportunity to see the benefits of it. Their lack of ability to pay for water led the Bolivians to a Water War in Cochabamba in 2000. The Water War included protests, strikes and marches and received international notice.

The reactions in Bolivia differ greatly from in Chile because most people in Chile were still able to afford to pay for water even after the increases in water prices. Chile is considered one of the wealthier countries in South America, which explains the lesser reaction to water privatization and the increase in water prices. In 2008, the cost of water in Santiago was \$1.15 per cubic meter with a 12.7% increase.²¹⁹ Today, there are still high water prices, but the Chilean people have not revolted against water privatization. This could be due to the lengthy water privatization process, which took three decades and allowed the people the chance to see the benefits.

The reactions in Chile and Bolivia both differ from the reactions in Peru, which started out in favor of privatization. As the process continued, tensions increased and many people became unhappy with the privatization. In 1994, water privatization in Lima failed due to public opposition. The president at the time, Fujimori, was unable to find a way to show that water privatization would not increase water prices. Although there

²¹⁹ Global Water Intelligence. "World Water Prices Rise by 6.7% (Key data from the 2008 GWI/OECD Global Water Tariff Survey)." *Global Water Intelligence: Market-Leading Analysis of the International Water Industry* 9:9 (2008).

were no big protests, the opposition in Lima caused Fujimori to stop water privatization because he wanted to be reelected president. Fujimori knew that if he increased water prices through water privatization that the people would not vote for him. In 2008, the cost of water in Lima was \$0.40 per cubic meter with a 37.8% increase.²²⁰ The people in Bolivia had the strongest reaction against water privatization with protests and a Water War, but in Peru, the opposition against water privatization forced its end.

The public response helped lead to the ultimate outcome, which reveals the situation of the country after water privatization. Chile was the only country of the three that still has its water system privatized today. Since privatization, water coverage has increased from 90 percent to about 96 percent nationally. Bolivia and Peru terminated full privatization in its cities because of the massive problems they faced when they tried to privatize the water system of various cities, such as Cochabamba, Bolivia and Lima, Peru. The governments of both countries had to terminate the contracts they had with the transnational corporations due to the large opposition movement against water privatization. In both Bolivia and Peru, there was still a slight increase nationally in the percentage of people who have water access in both rural and urban areas. In La Paz/El Alto, there was a slight increase in water coverage, but in Cochabamba the water coverage actually declined after the water privatization attempt. Although there was a slight improvement, the two countries are still facing problems with their water systems because they were not built to support such large populations and to supply water to them. The governments of both countries are still looking for a solution to their water problems.

²²⁰ Global Water Intelligence. "World Water Prices Rise by 6.7%."

Bolivia would not be able to return to water privatization without large opposition in its cities. Peru turned towards partial privatization in Lima, but has faced some opposition from the people against any form of privatization. The populations of Ecuador, Peru and Bolivia have disputed the idea of water privatization strongly to the point that the World Bank is now starting to become “privatization agnostic.”²²¹ It is evident that strong opposition to water privatization by the people was a reason it failed. Bolivia and Peru are still trying to find another method to expand its water systems and increase water access to their entire populations.

One could argue that water privatization was successful in Chile because it was one of the wealthier countries in South America. It could also be said that water privatization did not work in Bolivia and Peru because they are poorer countries. Poverty versus wealth is related to privatization because in a wealthier country the people can afford to pay the dramatic increases in water prices, which comes with privatization, as compared to poorer countries, which cannot afford to pay the increased water prices. As seen in the case study on Bolivia, the people rejected water privatization because they could not afford to pay the increased water prices meaning that they could not receive water. In Chile, the people were able to afford the increased prices, which allowed them to accept water privatization. The privatization of water in Chile supports the argument of Stephen E. Draper, who argues for it. In Chile, water became more efficient, reached almost the entire population and decreased the waste of water because the higher cost caused people to use less water. The lack of infrastructure in Bolivia and Peru also caused a need for more investment from transnational corporations to run the privatized water systems. This caused a huge increase in the cost of water to a point where the people

²²¹ Trawick. 444.

could not afford to pay for it because they did not have high enough incomes. An example of this can be seen with the case study on Bolivia where water fees were increased to 445 dollars a year, but the average minimum wage was only 60 dollars a month. The dramatic increase in water fees caused Bolivians to be unable to receive water since they were unable to pay for it. The privatization in Bolivia and Peru supports the argument of Jennifer L. Naegele, who argues against it. The privatization of water in Bolivia and Peru cut off service to the people who could not afford the dramatic increase in prices, which is one of the reasons Naegele is strongly opposed to it.

The question of whether the Latin American experience suggests that privatization is a promising path to deliver an affordable water supply is more of a political than technical question. The experience of Chile suggests that in wealthy countries where the majority of the population lives in urban areas, it may be best to privatize the water system to increase coverage and efficiency. The experience of Bolivia suggests that in poor countries, it may be best to keep the water system in public control because the government is able to regulate the price of water. The experience of Peru suggests that in a middle income country, it may be best to turn to partial privatization so that the water system becomes more efficient and better run but also so that the government can regulate the price of water. According to the case study in Bolivia, it may be best to not implement water privatization quickly. It may be best to follow the water privatization process of Chile because privatization of its water system occurred over twenty-five years, which allowed the people time to adjust to it. In Peru, it may be best to follow the water privatization process of Lima rather than Pacasmayo because in Lima privatization of the water system occurred over two decades and was better

prepared. If there is a large urbanization movement in a country, something may need to be done to increase water coverage in the cities. Partial privatization, like in Peru, may be an option in poor countries because the government can still retain control of the water prices, but the water system becomes more efficient. Bolivia, Chile and Peru all had different experiences with water privatization, from quick attempts to long drawn out processes, which allowed full privatization to work in some countries and be removed from other countries.

Bibliography

- Alchian, Armen A. *The Concise Encyclopedia of Economics*.
- Baer, Werner, and Gabriel Montes-Rojas. "From Privatization to Re-Nationalization: What Went Wrong With Privatizations in Argentina?" *Oxford Development Studies* 36:3 (2008): 323-337.
- Bauer, Carl J. *Against the Current: Privatization, Water Markets, and the State in Chile*. (Boston: Kluwer Academic Publishers, 1998).
- Bennett, Vivienne, Sonia Dávila-Poblete, and Nieves Rico. *Opposing Currents: The Politics of Water and Gender in Latin America*. (Pittsburgh, PA: University of Pittsburgh Press, 2005).
- Birch, Melissa H. and Jerry Haar. *The Impact of Privatization in the Americas*. (University of Miami: North-South Center Press, 2000).
- Bitrán, Gabriel and Pamela Arellano. "Regulating water services: Sending the right signals to utilities in Chile." *Public Policy for the Private Sector*. The World Bank Group: Private Sector Development Vice Presidency, 2005: 1.
- Blinder, Alan S. *The Concise Encyclopedia of Economics*: 2.
- "Bolivia Water Management: A Tale of Three Cities." *Précis*. World Bank Operations Evaluation Department, 2002: 1-3.
- Buchichio. "To Defend Water is to Defend Life." Choike.org. (Project of the Instituto del Tercer Mundo, NGO in Consultative Status with the Economic and Social Council of the United Nations). 20 Jan 2013.
http://www.choike.org/nuevo_eng/informes/2603.html
- Budds, Jessica, and Gordon McGranahan. "Are the Debates on Water Privatization Missing the Point? Experiences in Africa, Asia and Latin America." *Environment and Urbanization*. 15:87 (2003): 87-113.
- Busaños, Federico, Evamaria Uribe and Robert Willig. "Can Privatization Deliver? Infrastructure for Latin America." Inter-American Development Bank. 1999.
- Castro, José Esteban. "Neoliberal Water and Sanitation Policies as a Failed Development Strategy: Lessons from Developing Countries." *Progress In Development Studies* 8.1 (2008): 63-83.
- Cech, Thomas V. *Principles of Water Resources: History, Development, Management, and Policy*. (New York: John Wiley & Sons, Inc, 2005).

- Census Bureau. "Population Trends: Bolivia." Population Division, DESA, United Nations: 146-147.
- Chong, Alberto and Florencio López-de-Silanes. *Privatization in Latin America : Myths and Reality*. (Washington, DC: World Bank and Stanford University Press, 2005).
- CIA. United States of America. The Central Intelligence Agency. *The World Factbook: Bolivia*.
- CIA. United States of America. The Central Intelligence Agency. *The World Factbook: Chile*.
- CIA. United States of America. The Central Intelligence Agency. *The World Factbook: Peru*.
- Clarke, George, Katrina Kosec, and Scott Wallsten. "Has Private Participation in Water and Sewerage Improved Coverage? Empirical Evidence from Latin America." *Journal of International Development* 21.3 (2009): 327-361. *Business Source Complete*.
- Collier, S. and W. Sater. *A History of Chile, 1808-1994*. (Cambridge: Cambridge University Press, 1996).
- Dinar, Ariel, Mark W. Rosegrant, and Ruth Meinzen-Dick. "Water Allocation Mechanisms-Principles and Examples." World Bank, Agriculture and Natural Resources Department and IFPRI.
- Draper, Stephen E. "Limits To Water Privatization." *Journal Of Water Resources Planning & Management* 134:6 (2008): 493-503.
- Economic Commission for Latin America and the Caribbean. "Progress in the Privatization of Water-Related Public Services: A Country-By-Country Review for South America." ECLAC (1998).
- Executive Summary. *Bolivia Public Expenditure Review*. (Washington, DC: World Bank, 1999).
- Frontline World. "Timeline: Cochabamba Water Revolt." PBS: Frontline World, 2002. <http://www.pbs.org/frontlineworld/stories/bolivia/timeline.html>
- Global Water Intelligence. "World Water Prices Rise by 6.7% (Key data from the 2008 GWI/OECD Global Water Tariff Survey)." *Global Water Intelligence: Market-Leading Analysis of the International Water Industry* 9:9 (2008).
- Gramant, Alexandre de. "After the Water War: The Battle for Jurisdiction in Aguas del

- Tunari, S.A. v. Republic of Bolivia." *Transnational Dispute Management*. 3.5 (2006): 1-42.
- Grusky, Sara and Maj Fill-Flynn. "Will the World Bank Back Down?: Water Privatization in a Climate of Global Protests." *Public Citizen's Water for all Program* (2004): 1-38.
- Guasch, J. Luis, Jean-Jacques Laffont, and Stéphane Straub. "Renegotiation of Concession Contracts in Latin America." *International Journal of Industrial Organization*. 26:2 (2008): 421-442.
- Gurtner, Bruno. "The Financial and Economic Crisis and Developing Countries." *International Development Policy: The Financial and Economic Crisis and Developing Countries*. (2010): 189-213.
- Haarstad, Håvard and Vibeke Andersson. "Backlash Reconsidered: Neoliberalism and Popular Mobilization in Bolivia." *Latin American Politics & Society* 51.4 (2009): 1-28.
- Hailu, Degol, Rafael Osorio and Raquel Tsukada. "Water Privatisation and Renationalisation in Bolivia: Are the Poor Better Off?" *International Policy Centre for Inclusive Growth* (2009): 1.
- Herraiz, Iñigo. "Uruguay Declara en Referéndum Popular el Agua Como "Bien Público" y la Protege de Privatizaciones." *Agencia de Información Solidaria* (2004).
- Hylton, Forrest and Sinclair Thomson. *Revolutionary Horizons: Past and Present in Bolivian Politics*. (London; New York: Verso, 2007).
- Ioris, Antonio Augusto Rossotto. "The Neoliberalization of Water in Lima, Peru." *Political Geography* 31.5 (2012): 266-278.
- Jaña, Else Chanduví. "Water: A Human Right under Threat." *LatinAmerica Press* 39.20 (2007).
- Klarén, Peter Flindell. *Peru: Society and Nationhood in the Andes*. (Oxford: Oxford University Press, 2000).
- Kohl, Benjamin and Linda C. Farthing. *Impasse in Bolivia: Neoliberal Hegemony and Popular Resistance*. (London: Zed Books Ltd, 2006).
- Kohl, James V. "Peasant and Revolution in Bolivia, April 9, 1952-August 2, 1953." *The Hispanic American Historical Review* 58:2 (1978): 238-259.
- Kuper, Adam, and Jessica Kuper. *The Social Science Encyclopedia*. 2. (London; New York: 2004)1206.

- Larrain, Sara and Colombina Schaeffer. "Conflicts Over Water in Chile: Between Human Rights and Market Rules." *Chile Sostenible*. Santiago, Chile (2010): 1-57
- Lawrence J. MacDonnell. "Water Banks: Untangling the Gordian Knot of Western Water." 1995.
- "La Paz." *Britannica Concise Encyclopedia*. Chicago: Encyclopedia Britannica, 2009. *Credo Reference*.
- McDevitt, Thomas. "International Brief, Population Trends: Peru." U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census (1999): 1-4.
- Minority Rights Group International, *State of the World's Minorities and Indigenous Peoples 2012 - Chile*, 28 June 2012.
- Miroso, Oriol, and Leila M. Harris. "Human Right to Water: Contemporary Challenges and Contours of a Global Debate." *Antipode* 44:3 (2012): 932-949.
- Naegele, J. "International Perspective: What is Wrong With Full-Fledged Water Privatization?" *Journal of Law and Social Challenges* 6 (2004): 99-167.
- Northern Colorado Water Conservancy District. "Northern Water C-BT Project." <http://www.northernwater.org/WaterProjects/C-BTProject.aspx>
- Office of Public Communication, Bureau of Public Affairs. "Background Notes: Bolivia." (1991)
- Olivera, Oscar and Tom Lewis. *Cochabamba!: Water War in Bolivia*. (Cambridge, Mass: South End Press, 2004).
- Operations Policy and Country Services: World Bank. "Review of World Bank Conditionality." (2005): 1-27.
- Pan American Health Organization: World Health Organization. "Country Profiles: Bolivia." *Epidemiological Bulletin* 24.1 (2003)
- Petras, James F. and Henry Veltmeyer. *Social Movements and State Power: Argentina, Brazil, Bolivia, and Ecuador*. (London; Ann Arbor, MI: Pluto Press, 2005).
- Prasad, Naren. "Privatisation of Water: A Historical Perspective." *Law Environment and Development Journal* 3:2 (2007): 219-233.
- Rex A. Hudson, ed. *Chile: A Country Study: Demographic profile*. Washington: GPO for the Library of Congress, 1994.

- Rich, Bruce. "Rights To Water And Privatization." *Environmental Forum* 28.1 (2011): 20. *Environment Complete*.
- Rodgers, Dennis, Jo Beall, and Ravi Kanbur. "Latin American Urban Development into the 21st Century: Towards a Renewed Perspective on the City." United Nations University- World Institute for Development Economics Research (2011).
- Savenije, Hubert and Pieter van der Zaag. "Water as an Economic Good and Demand Management: Paradigms with Pitfalls." *Water International* 27:1 (2002) 98-104.
- Sian, Lazar. *El Alto, Rebel City: Self and Citizenship in Andean Bolivia*. (Durham and London: Duke University Press, 2008).
- Solanes, Miguel, and Fernando Gonzalez-Villarreal. "The Dublin Principles for Water as Reflected in a Comparative Assessment of Institutional and Legal Arrangements for Integrated Water Resources Management." Global Water Partnership Technical Advisory Committee (TAC). (1999)
- Torero, Maximo. "Peruvian Privatization: Impacts on Firm Performance." "What are the Costs and Benefits of Privatization in Latin America." Inter-American Development Bank Research Department: 1-69.
- The World Bank. "Data: Chile."
- The World Bank. "Data: Peru."
- Trawick, Paul B. "Against the Privatization of Water: An Indigenous Model for Improving Existing Laws and Successfully Governing the Commons." *World Development* 31.6 (2003): 977-996. *Political Science Complete*.
- Trawick, Paul B. "Going with the Flow: The State Contemporary Studies of Water Management in Latin America." *Latin American Research Review* 40:3: 443-456.
- UNDP. International Human Development Indicators. *Human Development Reports* (2012). <http://hdr.undp.org/en/statistics/>
- UNICEF and the WHO. "Progress on Drinking Water and Sanitation 2012 update." UNICEF and the WHO, 2012: 1-59.
- U.N. Committee on Economic, Social and Cultural rights, 29th session. "General Comment No. 15 [The right to water]." (E/C.12/2002/11). 11-29 November 2002.
- U.N. General Assembly, 64th session. "Resolution 292 [The human right to water and sanitation]." (A/Res/64/292). 3 August 2010.

- U.N. General Assembly, 55th Session. "Resolution 2 [United Nations Millennium Declaration]." (A/Res/55/2). 18 September 2000.
- Vanden, Harry and Gary Prevost. *Politics of Latin America: The Power Game*. (New York: Oxford University Press, 2009).
- Wade, Jeffrey S. "The Future of Urban Water Services in Latin America." *Bulletin of Latin American Research* 31.2 (2012): 207-221.
- Wahaj, Robina and Maria Hartl. "Gender and Water: Securing Water for Improve Rural Livelihoods: The Multiple-Uses System Approach." International Fund for Agricultural Development (2007): 1-28.
- WHO. "Trade, foreign policy, diplomacy and health: Washington Consensus." (2012)
- Wilder, Margaret, and Patricia Romero Lankao. "Paradoxes of Decentralization: Water Reform and Social Implications in Mexico." *World Development* 34.11 (2006): 1977-1995.
- World Bank. "Concessions, Build-Operate-Transfer (BOT) and Design-Build-Operate (DBO) Projects. PPP in Infrastructure Resource Center for Contracts, Laws and Regulation.
- World Bank. "Implementation Completion and Results Report on a Loan in the Amount of US\$150 Million to the Republic of Peru for the Lima Water Rehabilitation and Management Report." *Sustainable Development: Bolivia, Ecuador, Peru and Venezuela Country Management Unit; Latin America and Caribbean Region* (2009).
- World Bank: Operations Policy and Country Services. "Review of World Bank Conditionality." (2005): 1.
- World Water Council. "4th World Water Forum: Water problems in Latin America." 2006.