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Our Thirsty World: Contextualized Responses to the World Water Crisis

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Our Thirsty World:
Contextualized Responses to the World Water Crisis

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In partial fulfillment of a Bachelor of Arts Degree in Environmental Policy, 2011/12
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Thousands have lived without love, not one without water

-W.H. Auden

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Preface

Wars fought over oil have characterized the latter half of the past century, the repercussions of which have been felt in every corner of the globe. Although war remains a constant, attention is transitioning away from oil to another natural resource. As we move through the 21st century, water wars are now at the forefront of global conflicts. Fighting over access to this vital resource is nothing new. Allen Snitow, a documentary filmmaker and journalist claims: “For thousands of years, the conflicts between towns and countries have been defined by the battle over who gets to use the stream. The word *rival* and *river* have the same root.”¹ Disputes over access to water have been inevitable because of human’s dependence on this natural resource for sustenance. The lack of a substitution for water makes the world water crisis a threat requiring immediate attention and innovative solutions.

The assumed responsibility of the government to provide sustainable solutions has proven ineffective in its failure to protect the human right to water. As a *world* water crisis, there is a need for a more cohesive management approach. Identifying and implementing effective and equitable approaches to water management is a highly debated subject across many disciplines. A common approach to combating issues of access to potable water involves the private sector and its reliance on the market. Alternatively, some advocate for treating water as a public or community good to avoid the commodification of an essential resource. Through various examples and a fleshed out case study, I illustrate how solutions to the water crisis are not determined by

¹Alan Snitow, Deborah Kaufman, and Michael Fox, *Thirst: Fighting the corporate theft of our water*, (San Francisco: Jossey-Bass, 2007), 3.

theoretical frameworks, but are shaped by the viability of the approaches in a given region. The factors that influence the feasibility of an approach include: the availability of water resources and other geographical or environmental circumstances; the political stability or corruption within the government; the degree of established infrastructure; determination of who the government is responsible for providing water services to; and the specific cultural needs of different groups. By analyzing the aforementioned theoretical perspectives on water management through a lens that considers each of these factors, I attempt to identify and analyze the context for which these approaches are appropriate and effective in providing equitable access to clean water. The political, economic, cultural and geographical contexts of a region are critical in considering how to best alleviate issues of access to potable water. In addition, I argue that across all of these diverse contexts in which we identify water access issues, it is invariably necessary to treat water as a public good in order to protect the human right to water.

Terminology Disclaimer

Throughout this paper, I will explore approaches to the world water crisis, while mainly focusing on what I refer to as the “Global South,” the “third world,” or “developing countries.” I use these terms to reference countries of a certain economic standing, comparable to the more affluent economies of the “Global North,” “first world,” or “developed countries.” However, I acknowledge these terms are problematic in their attempts to impose an all-encompassing category on people from many different cultures and living circumstances. The Global North/ South binary is problematic because it makes an incorrect generalization about how a country’s geographical positioning

automatically indicates a certain economic status and standard of living. An example of this label's inaccuracy is Australia, a country located in the southern hemisphere, but which also has a standard of living similar to that of the United States. References to the first/ third world have negative associations with winning or losing a race that leaves "third world" citizens somehow behind or less than adequate. The concept of developing versus developed nations indicates a linear model with the status of "developed" as the desired final destination. It implies that developing countries have yet to reach their full potential, and are going through inevitable changes that mirror the developmental processes of already matured nations.

For the sake of this project, I use these terms, mindful of their implications, but with the intention of providing insight to the complexity of the water crisis. My aim is to provide an analysis of water management, which focuses on countries *primarily* located in the Global South; they are generally considered to be industrializing, developing nations. Within the scope of this paper, I cannot individually address each region faced with water access issues, so instead I use terms like the "Global South" as a starting point, and then use the case study of Botswana to highlight how individual circumstances shape the necessary solutions. During my discussions on Botswana, I use a story surrounding the country's indigenous people, the Bushmen. Although most of the names used to refer to this group of people, including the San, Basarwa, and Bushmen, are slightly pejorative, I choose to refer to them as Bushmen because that is how they most commonly refer to themselves. I use the terms Bushmen, developing, and Global South for the purpose of having consistent terminology, not to further perpetuate imposed identities or ideologies.

Chapter one: The World Water Crisis

*The water crisis is the most pervasive, most severe, and most invisible dimension of the ecological devastation of the earth.*²

A young girl who looks to be no older than eight balances a plastic tub of water at least twice as wide as she is on her head, with her arms completely stretched above to steady the heavy load. Each step she takes is deliberate and slow so as not to spill a drop of the river water. Despite the steady pace, her eyes quietly cry out in pain as the pounds and pounds of water push down on every ounce of her body. She is following a girl, maybe a few years her senior, with a baby fastened to her back. Who is this water for? How long will it last before another back-breaking trip needs to be made?

In this scene, in the documentary *Flow*³, Irena Selena makes a case against the privatization of the world's disappearing freshwater supply by tracing the stories of adversely affected individuals. In Kwazulu-Natal, South Africa, a young woman, the sister of the girl fetching water, suddenly finds herself faced with the responsibility of caring for her siblings and tending to all household responsibilities upon the death of their mother. The mother died from water-borne diseases, so issues of poor water quality are an oppressive reality for them. The young woman recognizes the need for her siblings to go to school, but is unemployed and has no means of affording school fees. Aside from being unable to finance their education, the family cannot afford to have a tap for water installed inside their home. Somewhere near the village there is a metered tap that turns

²Vandana Shiva, *Water Wars: Privatization pollution and profit*, (Cambridge: South End Press, 2002), 1.

³Selena, Irena, "Flow: For Love of Water," DVD.

on some days, and runs dry on others. A row of colorful, dirty and damaged plastic containers are lined up in front of the pump waiting to be filled, with women young and old standing around in anticipation. They have been waiting for five hours for the tap to turn on, but are patient when they recall how “sometimes we can spend four weeks without water.”⁴ The water eventually flows out of the rusted tap and into the first empty container, eliciting laughter and cries of relief.

With an unreliable tap and the inability to pay for a private metered pump, the motherless family is forced to retrieve water from the river. As the film shows a girl filling up an old soda bottle from a muddied river, the responsible young woman explains how the government has advised them to purchase a tablet to kill any harmful bacteria. This is yet another necessity they are unable to afford. As the young woman said: “Sometimes you have to drink water the way it is.”⁵ This family’s story is illustrative of the ways in which the world water crisis shapes the realities of individuals and their communities.

Today, more people own cell phones than toilets, and one in eight people are without access to potable drinking water.⁶ When clean water and basic sanitation are inaccessible, people’s livelihoods are threatened. Water is the fundamental building block of life and the essential human element. There is often a disconnect between the Global North and Global South in regards to what is a normal and acceptable distance between a person’s home and their water source. For many in the developed world, it is a mere matter of walking a few steps to the nearest faucet where an unlimited amount of

⁴ *Ibid*

⁵ *Ibid*

⁶ “The Crisis.” <http://water.org/water-crisis/water-facts/water>, accessed March 22, 2012.

safe water is immediately at their disposal. This does not account for the one billion people without access to clean water, and who potentially travel four miles a day⁷ to fill up five gallons for the day (compared to the average 176 gallons used daily by Americans).⁸ The disconnect between these two realities of the developed and developing world is indicative of how precious of a resource water is, and the recognition that it is not something to be taken for granted.

In July 2010, the United Nations adopted Resolution 64/292, which explicitly recognizes the human right to water and sanitation. Additionally, it acknowledged that:

Clean drinking water and sanitation are essential to the realization of all human rights. The resolution calls upon States and international organizations to provide financial resources, help capacity-building and technology transfer to help countries, in particular developing countries, to provide safe, clean, accessible and affordable drinking water and sanitation for all.⁹

Based on UN standards, sufficient water accounts for drinking, personal sanitation, washing of clothing, food preparation, and personal and household hygiene. In addition to safe and healthy water supplies, the UN calls for physically accessible water to be within 1,000 meters of the home and to take no longer than half an hour to collect.¹⁰

Accessible, safe and sufficient amounts of water should also be affordable, for which the United Nations Development Program suggests that less than 3 per cent of household income should be used to cover water costs.¹¹ From the United Nations perspective, the human right to water does not mean the human right to free water.

⁷ Laurie Ure, "For nearly a billion people, a glass of water means miles to walk," *CNN*, April 29, 2011.

⁸ "The Crisis."

⁹ "Water For Life Decade," United Nations, accessed March 2012.

¹⁰ *Ibid*

¹¹ *Ibid*

Issues of gender inequality, education inequalities, and poverty as a whole further complicate the issue of accessing potable water. In developing countries, girls and women are often the ones to undertake the responsibility for fetching water.¹² The fact that anyone should have to walk upwards of four miles a day for something as essential as water is problematic in and of itself. Additionally, the gendered nature of the water work poses particularly severe risks for women. Not only is it a physically taxing burden, but the time spent also prevents women from engaging in activities outside of their domestic duties. It is often the case that women already have patriarchal systems working against their advantage in terms of social mobility and economic worth (although by no means is this true in every society). The chain of events that ensue is often cited by development analysts and activists as an explanation for the status of “undeveloped” regions of the world.

The more time girls spend helping their mothers bear the burden of transporting heavy barrels of water, the less time the girls spend in school. According to the non-profit organization, *Our Water Commons*, if safe drinking water and adequate sanitation services were provided for everyone, there would be 272 million more school attendance days a year across the globe.¹³ Development analysts, activists, and many governments identify education as the key to working towards a higher standard of living, and increasing the breadth of possibilities for an individual’s future. However, a need for water or food for sustenance will always trump a need for education. There are already powers in place that are working against impoverished people, such as unrepresentative

¹² *Ibid*

¹³ “A Statistical Glimpse at the Global Water Crisis,” *Our Water Commons*, accessed March 2012.

governments, so keeping school a priority is challenging enough without the added strain of retrieving water. Instead of devoting time and energy to get water, time could be spent in school, growing more food or starting a business. It is thus evident how inaccessible water further exacerbates the unforgiving cycle of poverty.

Practices based on unlimited use and manipulation of the Earth's natural resources are particularly threatening to the world's water supply. A lack of access to potable water is heavily entrenched in the fact that water is a finite resource. Once a water source, be it a river or lake, is depleted, it is gone for good. The unique property of water lies in the fact that there is no substitute. It can be difficult to conceptualize a shortage of water on a planet that is covered 70% by water. However, given that only 2.5% of this is freshwater, the threat of the depletion of this resource is especially alarming. Of this small percentage of freshwater, 60% is held in glaciers and ice caps, 30% in groundwater, and 10% in surface waters.¹⁴ The surface water is where people grab hold of the resource for agriculture (which amounts to 70% of its use), industrial processes (22%), and home use (8%).¹⁵ This distribution of use indicates how heavily entrenched water is in the very existence of humanity, transcending the fundamental needs of survival.

Strains on the Earth's water supply can be better understood through Garret Hardin's story of *The Tragedy of the Commons*. The story illustrates what happens when individuals act on behalf of their own best interest, with little foresight as to what might happen to a resource once it has been overexploited. To prove his point, Hardin uses the example of an English grazing pasture that is open for all to use to herd their cattle. He

¹⁴ www.waterforpeople.org, accessed February 2012.

¹⁵ *Ibid*

points to the inevitability of each herdsman to bring as many cattle as they can in order to maximize their individual utility. Eventually, there are more sheep than the pasture can support, thus resulting in “the tragedy of the commons.”¹⁶ Although actually in reference to open-access resources instead of a “commons”, Hardin asserted that “ruin is the destruction toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a common brings ruin to all.”¹⁷ A more modern day example of exploitation of a “commons” is Los Angeles’ air pollution. The smog in the LA basin is an example of what happens when individuals, including industries, emit particulates into the air without acknowledging that they are only one among many who are polluting the communal resource of air. The same story can be translated to the way water sources are treated and misused.

The aforementioned perspective of people justifying environmental degradation is informed by the reliance on the ingenuity of humans. This essentially speaks to the ability of people to continuously think innovatively and advance our technology to whatever level necessary to “right” any “wrong” inflicted on the environment. The fact that the United Nations projects that 2 billion people will face a major water shortage by 2050 if nothing is done, indicates that we cannot simply engineer our way out of a growing water scarcity.¹⁸ Many water technologies today are either unaffordable or geographically impractical when applying them universally.

¹⁶ Garrett Hardin, *The Tragedy of the Commons*. Science 162: 1243-1248 (1968).

¹⁷ Hardin, *The Tragedy of the Commons*, 1245.

¹⁸ United Nations Committee on Economic, Social and Cultural Rights, *Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social, and Cultural Rights* (Geneva, Switzerland, 2002).

Evidence that context is especially important is the geographic or economic constraints that prevent the application of technological innovations for water collection. For example, fog nets are a recent innovation that saves time collecting water. They are large mesh nets that are suspended on ridgelines to intercept moving fog, trapping millions of water droplets, and trickling down into tanks to be accessed by people.¹⁹ Although atmospheric water is abundant and clean, this passive technology can only work in hilly areas where there is a heavy presence of fog. So, although this technology has benefitted some communities in Nepal, it is not a viable solution for other places (such as the flat, dry Kalahari Desert). The fact that this is not a feasible approach everywhere reinforces my argument of considering the contextual needs of areas facing issues of access to potable water. There is a pressing need to improve the way our existing water supply is managed and to shift the focus away from increasing the water supply towards decreasing consumption. Given that overall global water use has been growing at a rate more than double that of the world's population in the last century, it is imperative to consider water management as part of the solution to an impending crisis.²⁰

Water management is further complicated by the fact that many of the world's water sources are transboundary. Water knows no boundaries, thus requiring inter-state cooperation. Peter Gleick, a water and climate analyst (and President of the Pacific Institute for Studies in Development, Environment, and Security in Oakland, California), speaks to some of the primary issues with transboundary water management policies:

¹⁹ "Collecting water from mountain fog," WaterAid, accessed April 2012, http://www.wateraid.org/uk/what_we_do/where_we_work/nepal/445.asp.

²⁰ "The Use of Water Today," World Water Council, accessed April 2012, <http://www.worldwatercouncil.org/fileadmin/wwc/Library/WWVision/Chapter2.pdf>.

“most transboundary water agreements...are based on the assumption that future water supply and quality will not change...most treaties and international agreements lack adequate mechanisms for addressing changing social, economic, or climate conditions.”²¹ Gleick is especially concerned with how climate change further complicates issues of water management. Human-induced change to the Earth’s climate system has already started, and will continue to have significant implications for the hydrological cycle. In addition to the multitude of effects wrought by climate change, it is expected to impact water availability, timing, quality, and demand.”²² Water scarcity is often the issue addressed in discussions of the impacts of climate change. Water quality is also an increasing concern: rising sea levels, for example can potentially intensify saltwater permeating deltas.²³

In order to better understand how international institutions and organizations have responded to issues of water scarcity and quality thus far, it is necessary to examine relevant policies, and how they have shaped discussions of potential solutions. Figure 1 provides a brief historical sketch of international policies, treaties, and conferences relating to water. The list is by no means complete, but includes policies that were seemingly most often cited or referenced in the literature on water governance.

²¹ Peter Gleick, *The World’s Water: The Biennial Report on Freshwater Resources* (Washington D.C.: Island Press, 2012), 7.

²² *Ibid*

²³ Gleick, *The World’s Water*, 8.

Figure 1. History of international water policy developments

Forum	Relevance to Water Issue²⁴	Actors	Implications
1972 Stockholm Conference ²⁵	Recognized a need for equitable water use	113 countries, 19 inter-governmental agencies, 400 inter-governmental and non-governmental organizations	<ul style="list-style-type: none"> • Recognition does not hold anyone accountable to take action → no efforts to integrate environmental concerns into economic planning/ decisions • Lead to creation of United Nations Environment Program → recognizes link between environment and development and need to develop sustainably
1981-1990: International Drinking Water Supply & Sanitation Decade	“Provide every person with access to water of safe quality and adequate quantity, along with basic sanitary facilities, by 1990”	Representatives of 26 United Nations organizations	<ul style="list-style-type: none"> • 600-700 million people gained access to water, but quantitative goals were not reached • Recognized that reaching these goals requires a lot more time and money than originally speculated
1992 Conference on Environment & Development: The Rio Declaration/ Earth Summit/ Agenda 21	Protection of the quality and supply of freshwater resources → includes application of integrated approaches to the development, management and use of water Development and environment are understood as strongly associated, but water is not considered a high priority	178 governments	<ul style="list-style-type: none"> • Makes explicate plan for implementation to be completed by target dates, but goals were not fully realized • Action plan <i>encourages</i> the global management of freshwater and the integration of water programs into economic and social policy plans • Humans as main focus for sustainable development
1997 First UN Water Conference	“All people have the right to have access to drinking water whose quantity and quality are equal to their basic needs”	Delegates from over 165 countries	Water is defined as common good → does not mean that it will be treated/distributed as such
1992 Dublin Conference	“Water has an economic value in all its competing uses and should be recognized as an economic good.” Also recognizes important role of women in water management.	100 country’s government-designated experts, 80 international, intergovernmental and non-governmental organizations	Internationally recognized justification for the privatization of water → fails to protect the human right to water
2000 UNGA Millennium Declaration	Goal: to halve the proportion of the population without sustainable access to safe water and basic sanitation needs by 2015	154 countries’ heads of states	<ul style="list-style-type: none"> • Still in progress, but actions are not on track to reach goal • Still leaving half of the proportion of population

²⁴ “Timeline of international conferences,” The Rights to Water and Sanitation, <http://www.righttowater.info/timeline-of-international-conferences>.

			without access to water → how do you chose who benefits?
2002 General Comment on the Right to Water	Adopted by UN Committee on Economic, Social and Cultural Rights: “States should ensure access to the minimum essential amount of water that is sufficient and safe for personal and domestic uses to prevent diseases”	United Nations’ Committee on Economic, Social and Cultural Rights	Non-binding interpretation of the International Covenant on Economic, Social and Cultural Rights Protection of indigenous peoples’ access to adequate water
2005-2015 International Decade for Action “Water for Life”	Goals: to focus more on implementation of water-related programs and projects; to ensure participation of women in water projects; deepen cooperation at all levels	Organized by UN General Assembly, but expected that most countries will nominate someone to spearhead projects	Still only requires voluntary involvement
2008 UN Human Rights Council	3-year process to investigate the state of the human right to water and sanitation	Appointed Catarina de Albuquerque as an independent expert to do investigations	<ul style="list-style-type: none"> Establishes a framework for assessing beneficial practices for water service providers from a human rights perspective Argues that private sector involvement can contribute to recognition of right to water by incorporating it into their business operations/ communicating with communities they impact → just suggestions, not implemented
2010 July UNGA: Resolution on the Right to Water & Sanitation	<p>“Declares 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” (cite)</p> <p>Calls upon States and international organizations to provide financial resources, capacity-building and technology transfer, through international assistance and cooperation, in particular to developing countries, in order to scale up efforts to provide safe, clean, accessible and affordable drinking water and sanitation for all”</p>	162 governments	<ul style="list-style-type: none"> Not a complete consensus (122 in favor, 0 against, 41 abstentions) Countries that did not vote in favor include Botswana, United States, UK → significant that some of largest bottled water industries are UK companies Implementation is still an issue Does not have target date to achieve goal → makes holding organizations and governments accountable for taking action

The history of international policy development on water indicates that there has been a strong push towards recognizing the need to address issues of water scarcity and

access to potable water. As is the case with most international agreements, it is difficult to implement effective policies or programs across the globe, given that every country or region has their own particular agenda and priorities. An overall theme in the implications mentioned in Figure 1 is that nobody is being directly held accountable for effecting actual change. The Millennium Development Goals (MDGs) mark a significant shift in policy ideology: it combines the recognition of the relationship between the environment and development, with an effort to implement programs that begin bringing greater access to water. In regards to these Millennium Goals, Joyeeta Gupta, a professor of climate change and water policy, takes issue with the implications of prescribing such an explicate objective: “MDGs and human rights are inconsistent, counter-productive (raising hopes that cannot be met), top-down, State-focused, selective half measures.”²⁶ She furthers this argument by pointing out that the United Nation’s approach to alleviating the issue still allows half of the target group to continue without access to water.²⁷ Despite the fact that the UN Human Rights Council views this goal as an opportunity to contribute to the progressive achievement of the right to water (given that they have to start somewhere), it is still problematic that there is no clear overarching goal that will continue this development. Furthermore, how does the UN, or any institution or group implementing this change chose who will and will not benefit? The fact remains that there are still 800 million people needing improved access to potable water.²⁸

²⁶ Joyeeta Gupta, “The Human Right to Water: Moving Toward a Consensus in a Fragmented World,” *Review of European Community and International Law* 19 (2010): 300.

²⁷ *Ibid*

²⁸ <http://www.charitywater.org/>, accessed March 2012.

Global institutions and participating governments argue that the United Nations General Assembly's (UNGA) recognition and adoption of water and sanitation is evidence that there is a wider global acceptance of water as a human right. Gupta, however, asserts that this a premature conclusion, and that the movement towards a universal acceptance of the human right to water is actually fragmented.²⁹ He points out that the water governance arena involves a multitude of actors with competing and conflicting discourses and approaches, thus leading to a fragmentation of the perspective (that the recognition of water as a human right is progressive in promoting its acceptance). With 28 different UN agencies, it can be assumed that the policies and approaches of these bodies will vary and often conflict with one another.³⁰ This fragmentation is furthered by the argument that the human rights angle is also being developed in other forums, such as the UN Human Rights Council. With agencies and organizations working as separate entities, cohesive policies and projects are increasingly difficult to implement.

Another argument made to contradict the convergence of the movement towards accepting water as a human right is the denial of a link between protecting this right and universal responsibilities. Generally speaking, people act of their own accord in that there is no unifying principal (or at least not a recognizable one) that all people not only agree upon, but also are compelled to protect on behalf of anyone else. It should not be surprising that capitalists advocate for the pursuit of individuals protecting their own rights. Actors involved in the governance of the water sector, such as development banks, industries and development aid agencies, often promote water as an economic

²⁹ Joyeeta Gupta, *The Human Right to Water*.

³⁰ *Ibid*

good. Their bottom line goal does not require them to maintain a position on political human rights. Pressure to do so is absent, given that water attribution cases have primarily ruled in favor of industries, and against the recognition of the human right to water.³¹

Why should we care:

To be clear, there is an endless list of humane reasons for why people should care about the global issue of access to potable water and the increasing scarcity of this essential resource. What is critical to keep in mind though, is that it is not effective to appeal to everyone's sense of morality in the hopes that all world citizens will be moved by a desire to right a wrong afflicting their fellow humans. For some, knowing that 3.5 million people die every year from water-related diseases is reason enough to care about the issue and understand the time-sensitive necessity of coming up with tangible solutions.³² Still, for many, this statistic is disembodied and a disconnected threat. It is pertinent to recognize a need to appeal to people through what they care enough about to act on and effect practical change. Motivating people to care about water scarcity needs to cater to society's interests. While millions of thirsty people do not pose a direct threat to their lives, threats to one's personal financial security do. This then indicates a need to frame the issue in terms of the financial ramifications caused by the world water crisis. From a financial perspective, health agencies would save \$7 billion USD a year, while individuals would save \$340 million USD if potable drinking water and sanitation

³¹ *Ibid*

³² "A Statistical Glimpse of the Global Water Crisis."

services were provided universally.³³ If nothing else, capitalists care about their money and care about where money can be saved or spent in ways that best benefit them individually. Capitalism today means nothing without consideration of the implications of globalization. Water knows no boundaries, so the fact that it is transboundary makes it impossible to escape having to confront the issue. In the Global North of our globalized world, it is easy for people to think that water scarcity does not disrupt or threaten their lives as long as they still have running water in their homes. However, water wars are an undeniable reality of the 21st century, so people who are under the impression that water access issues are irrelevant to their lives will inevitably feel the repercussions (if they have not already).

These repercussions can be better understood through the current controversy in Claremont, California over the pricing of water. Currently, the city receives their water from a private company Golden State Water, which is overseen by the California Public Utilities Commission.³⁴ The company is proposing plans that will help extend the life of the reservoir, which will consequentially increase the price rates of water in Claremont. Unsurprisingly, this has caused outrage among many Claremont residents, which has lead the city council to vote on the possibility of acquiring the water works. The citizen's indignation at increased water rates is illustrative of two key parts of the larger global water crisis. Firstly, changes in prices of water is problematic anywhere, including places in the developing and developed world. Secondly, issues of affordability and water

³³ *Ibid*

³⁴ "Claraboya maintenance water project starts March 12," *Claremont Courier*, March 12, 2012.

privatization is not just a problem of the “third world;” the repercussions of water access issues are felt in every hemisphere.

From a practical standpoint, knowing that our survival is contingent upon sustaining the world’s resource should arguably be reason enough to care about the world water crisis. Water is a finite resource, and the water we drink today is the same water dinosaurs drank billions of years ago. Our water supply is not increasing; we are only losing water as we disrupt the hydrological cycle. Despite popular assumptions, water scarcity is not an issue confined to the third world. Los Angeles, for example, one of the largest metropolitan cities in the world, is in the midst of a struggle to sustain an adequate water supply. A unique component of the issue is that everyone can relate to water because everyone needs it. Issues of access to clean water are thus present in all corners of the world, indicating a need to determine suitable approaches to managing water supplies sustainably and equitably. Once these issues of access to clean water are understood, we can begin to consider and analyze the potential approaches to the solution.

Chapter two: Perspectives on Water Management Approaches

*Water is what makes life possible on this planet. It is “of the body” and essential. Our reaction to it is visceral, and when we suddenly find we can no longer take it for granted, we react very rapidly.*³⁵

With an understanding of the context surrounding the world water crisis, the next step is to analyze the existing perspectives on water management approaches. The two most common ideologies treat water either as a private or public good. Although both the terms private and public are broadly defined, it is necessary to identify the scope of each of these terms in regards to what is meant by the private or public sector. Private involves the pursuit of profit (such as a corporation), while public includes anyone outside of the private sector (such as a government or non-profit organization). Each of the philosophies on treating water has specific policy recommendations for simultaneously alleviating issues of water scarcity and access to potable water. While there are arguments made from both sides that cite specific stories as evidence for their potential success, there is also evidence that suggests these approaches might not be applicable everywhere.

³⁵ Snitow, Kaufman and Fox, *Thirst*, 2.

Water as a private good:

*The market is amoral and it's going to lead you to taking advantage of pollution and scarcity, and frankly, it is going to lead you to selling to those who can buy it and not to those who need it.*³⁶

Today, the dominant paradigm in the distribution of goods, services and labor relies upon the power of the free market. The market is considered a viable means of ensuring efficient distribution of goods in our ever-increasingly globalized world. Water, it is argued by many economists, is no exception to the category of purchasable private goods. With increasing scarcity of the world's drinking water supply, many turn to a market environmentalism approach to ensure people's livelihoods are sustained. Karen Bakker, a professor and researcher of water governance, explains market environmentalism as "resource regulation that aims to deploy markets as the solution to environmental problems."³⁷ Essentially, this approach works to fuse the issues of economic growth, efficiency and environmental conservation into something that can be addressed by a single mechanism. Sheila Olmstead and Robert Stavins, researchers from the US National Bureau of Economic Research, assert that "market-based environmental policies are more cost-effective than conventional policies...[because] market-based regulations encourage behavior through market signals rather than through explicit

³⁶ Selena, Irena, "Flow: For Love of Water," Narrated in part by Maude Barlow, DVD.

³⁷ Karen Bakker, "The "Commons" versus the "Commodity": Alter-globalization, Anti-privatization and the Human Right to Water in the Global South," *Antipode* (2007), 431.

directives regarding conservation levels or methods.”³⁸ Advocates of the perspective of treating water as a private good or commodity generally tend to be private companies, bilateral aid agencies, and some governments.³⁹

Since the 1970’s the market environmentalism approach has increasingly become the dominant philosophy of development.⁴⁰ It is critical to consider the historical role of the market in the process of development. During countries’ transition out of the developing world, moving towards modern and developed nations, it is evident that participation in the market is a key indicator of a country’s developmental status. Those who have yet to join the world market economy rely upon the integrity of individuals or community groups to deal with issues of resource management, including the distribution of water. The issue of the tragedy of the commons combined with a growing global population has made it increasingly complicated to maintain a sustainable water supply and the oversight of its distribution without an external regulator.

The key philosophy of the market environmentalism perspective addresses the issues of resource scarcity and accessibility. With consideration to the scarcity of this essential natural resource, privatization of water sources creates an ability to increase the price of water in order to encourage its conservation. Supporters of this ideology reason that if water is treated as an environmental good, it will be more efficiently allocated. This provides a single solution to two simultaneously occurring problems: issues of environmental degradation and inefficient resource use. Essentially, the rationale of this ideology is based on the reasoning that since water has become an increasingly scarce

³⁸ Sheila Olmstead and Robert Stavins, “Comparing Price and Non-Price Approaches to Urban Water Conservation,” *National Bureau of Economic Research* (2008), 3.

³⁹ Karen Bakker, “The “commons” versus “commodity”

⁴⁰ *Ibid*

resource, it needs to be “priced at full economic and environmental cost in order to be allocated to its highest-value uses,” while also being managed profitably by companies.⁴¹ In regards to potential distributional considerations, Olstead and Stavins provide an example to illustrate how water pricing addresses issues of equity. A study found that low-income households in Southern California communities were “more price-responsive than high-income households.”⁴² They conclude then that if water demand management happens with price increases, those who are less able to afford increased prices will make more of a difference in saving water.

Advocates of this perspective also point to the failure of governments and aid agencies to achieve the designated goals of a universal water supply during the International Water and Sanitation Decade (1981-1990).⁴³ They argue that since the government and various development institutions have failed to meet this goal, there is a need for a different way of managing water systems. Those in the private sector view this failure as an opportunity for the development of a water market, which involves the formation of public-private partnerships (PPP). Public-private partnerships are established to enable the strengthening of the government’s water sector. Although both are forms of private sector engagement, there is a distinction between privatization and PPP: “Under a PPP, the public sector *retains* ultimate accountability to the citizen for the provision of a public service, whereas under privatization, accountability for delivery is *transferred* to the private party.”⁴⁴

⁴¹ *Ibid*

⁴² Olstead and Stavins, “Comparing price and non-price approaches,” 13-14.

⁴³ Karen Bakker, “The “commons” versus “commodity.”

⁴⁴ World Bank, *Attracting Investors to African Public-Private Partnerships*. Washington D.C.: 2009, 7.

In countries where infrastructure is not set in place or firmly established, an approach involving the private sector can provide assistance in development of at least the water sector. Katharina Gassner, a senior economist in the Finance, Economics and Urban Department of the Sustainable Development Network of the World Bank, argues that public-private partnerships have proven successful in other utility sectors, and that therefore, this success can be logically translated to the water sector. An example of successful public-private partnerships is in the electricity sectors, where there were stronger gains in productivity and service quality than with public management.⁴⁵ Additionally, private companies can act more directly and effectively because of the accountability they owe their shareholders and customers.⁴⁶ This is held in comparison to political accountability of citizens via political representatives, where politicians might take advantage of their power to delegate who does and does not benefit. It is complicated to compare which approach can be held more accountable for providing adequate access to water since both governments and corporations are failing to do so for different reasons. However, in the film *Flow*, the water governance experts assert that providing profit for investors makes it impossible to ensure clean drinking water for consumers, because they are accountable first and foremost to the investors.

To better understand critiques of the market environmentalism perspective, Bakker highlights a key justification for this approach: “From this perspective, water is no different than other essential goods and utility services. Private companies, who will be responsive both to customers and to shareholders, can efficiently run and profitably

⁴⁵ Katharina Gassner, World Bank, *Does Private Sector Participation Improve Performance in Electricity and Water Distribution?* Washington D.C: 2009.

⁴⁶ Karen Bakker, “The “commons” versus “commodity”

manage water supply systems.”⁴⁷ However, by recognizing water as an economic good, Bakker points out that users are redefined as “individual customers” instead of the consideration of “a collective of citizens.”⁴⁸ This is very indicative of one of the main critiques of the market environmentalism perspective, that is, that it fails to recognize the consideration of water as a human right.

There are two main types of public-private partnerships: Concession PPP and availability-based PPP. Both of these partnerships are projects that include public sector involvement, which is accountable to the region’s citizens, and someone from the private sector, who is accountable to the water users and the company shareholders. A concession public-private partnership occurs when

A public authority grants a private party the right to design, build, finance, and operate an infrastructure asset owned by the public sector. Concession PPP contract is for a fixed period, say 25-30 years, after which responsibility for operation reverts to the public authority. The private party recoups its investment, operating, and financing costs and its profit by charging members of the public a user fee... Thus a key feature is that the private party usually assumes the risk of demand for use of the asset, in addition to the risks of design, finance, construction, and operation.⁴⁹

An issue of concern with this type of partnership is what happens to the country once the contract expires. At the end of this 25-30 year contract, the nation’s water sector may be in the same place it was before the partnership, not having dealt with the problems facing the country initially. There is seemingly little incentive for a country to work on a part of its infrastructure that a private company is taking care of, especially when dealing with other large-scale and potentially costly infrastructural issues. The issue with private

⁴⁷ Karen Bakker, “The “commons” versus “commodity,” 441

⁴⁸ *Ibid*

⁴⁹ World Bank, *Attracting Investors to African Public-Private Partnerships*. Washington D.C.: 2009, 9.

involvement is the inherent exclusion of those who cannot afford the privatized good or service. I would argue then that this might establish a dependency of governments relying upon the private sector, which might consequentially allow for companies to take advantage of this need.

Another type of public-private partnership is availability-based:

Similar to a concession PPP, in that it also involves the private party designing, financing, building or rebuilding... operating and maintaining the necessary infrastructure...in this case, the public authority {as opposed to the users} makes payments to the private party, as when, and to the extent that a public service {not an asset} is made *available*. Hence the damage or usage risk remains with the public authority.⁵⁰

Originally, availability-based PPPs were established in the form of power purchase agreements in power generation projects. Given that the World Bank is hoping to fund these private projects, I identify this World Bank report as a perspective that conveys a non-objective evaluation of PPPs. “Governments have found these types of PPP to be very effective in ensuring that public facilities are delivered on time and on budget, are properly maintained, and are able to deliver public services in the context of constrained resources.”⁵¹

An example of a public-private partnership deemed successful by the World Bank is in Gabon, where a 20-year concession was established for “the production, transport, and distribution of both water and electricity.”⁵² The project in Gabon is considered by the World Bank to be the first “real” water concession in Africa because the contract defines the investment obligations and the government was able to prepare for private sector participation by “developing an appropriate legal framework and by increasing

⁵⁰ World Bank, *Attracting Investors to African Public-Private Partnerships*,

⁵¹ *Ibid*

⁵² World Bank, *Attracting Investors to African Public-Private Partnerships*, 113.

tariffs to reflect costs.”⁵³ Reports on the project claim the private operator had “performed well in its existing service areas, often exceeding targets, but less progress has been made in more isolated areas.”⁵⁴ Despite this failure to increase access to rural areas, the World Bank considers this project a success.

This relates back to the argument institutions (such as the World Bank and other advocates of PPPs) make that because these partnerships have proven successful in particular sectors (as seen with electrical power projects), it is entirely feasible that they would work similarly in the water sector. This, however, fails to recognize that a water market is different in nature due to the fact that when people can no longer afford increased electricity rates, they are not consequentially being deprived of an essential resource for survival, as is the case with water. Although this provides an example of how PPPs can be successful in certain sectors, it is also indicative of why water cannot be lumped under the same category when considering different management techniques. Even the World Bank alludes to the distinct nature of water projects by referring to it as a “politically sensitive sector [that] remains one of the least popular for private investment.”⁵⁵

When reporting on the success of some of their projects in order to attract investors to African PPPs, they also point out the drawbacks to each type of partnership. In discussing when it makes sense to use a concession versus an availability-based PPP, the World Bank states that it is “both a policy decision and a reflection of who is best

⁵³ World Bank, *Attracting Investors to African Public-Private Partnerships*, 114.

⁵⁴ *Ibid*

⁵⁵ *Ibid*

placed to pay for the service.”⁵⁶ In terms of affordability, which is arguably the main drawback of becoming involved in these partnerships, each PPP faces its own issues. From the perspective of the World Bank, there are recognized issues of demand risk and user affordability with concession PPPs. In comparison, availability-based PPP, affordability is “likely to be an issue in Africa because such projects do not involve user payment mechanisms.”⁵⁷ This highlights the fact that there is no single approach that can be applied universally.

Skepticism surrounding the World Bank’s intentions with PPPs stems from a general skepticism of the privatization of water. Vandana Shiva, a physicist and environmental activist, indicates that the PPP label of these World Bank funded projects is “powerful, both because of what it suggests and what it hides. It implies public participation, democracy, and accountability. But it disguises the fact that public-private partnership arrangements usually entail public funds being available for the privatization of public goods.”⁵⁸ Her point speaks to the injustice of denying the right to a public good by privatizing it. The World Bank’s publication on attracting investors addresses solutions to potential technical or monetary issues, but fails to recognize the core problems with these partnerships. It is thus sensible to be wary of World Bank projects given that involvement of the private sector has “a track record of risks and failures [because] private companies most often violate operation standards and engage in price gouging without much consequence.”⁵⁹ In the 1990’s, the World Bank imposed a loan condition that raised water prices for consumers, while giving the French water company,

⁵⁶ World Bank, *Attracting Investors to African Public-Private Partnerships*, 10.

⁵⁷ *Ibid*

⁵⁸ Vandana Shiva, *Water Wars*, 89.

⁵⁹ Vandana Shiva, *Water Wars*, 59.

Suez Lyonnaise des Eaux a 35 % profit.⁶⁰ This is not to say that PPPs do not have the potential to succeed (as they have proven successful in certain cases), but to argue against the automatic applicability of these projects universally. The repercussions communities have faced due to a lack of their direct involvement in water projects has led to what Shiva terms “a sweeping culture of corporate-states all over the world.”⁶¹ The unemployment of people working in local water and sanitation systems upon the arrival of corporate control is an example of one of the many repercussions. Shiva’s reference to “corporate-states” is a reference to the ways corporations are so entangled in governments that they are able to shape policies that will best benefit their company.

An example of how intertwined governments and corporations are is explained in the documentary *Flow*. The film points out that it is the World Water Council who is making decisions about how the world’s water resources are managed, and questions how it is these individuals were designated as the people to make such important judgment calls. One water analyst points out that the President of the World Water Council who is responsible for organizing the forums, is also the president of a Marseilles water company (which is half owned by Vivendi, half owned by Suez, two of the biggest water industries in the world). He further illustrates how these are not so small world connections: the former president of the IMF has the two vice presidents of Suez and Vivendi as his two most important advisors.⁶² These connections are an unmistakable example of what Shiva terms “corporate-states.”

⁶⁰ *Ibid*

⁶¹ Vandana Shiva, *Water Wars*, 87.

⁶² Irena Slena, *Flow*.

One of the most emblematic cases of private supply failure continuously cited by critics of this perspective is the city of Cochabamba, Bolivia. When countries are struggling to pay back excessive amounts of debt, they often turn to the World Bank or IMF to help alleviate their financial burdens. It is common for these institutions to demand water deregulation as a lending condition, thereby forcing the region to privatize their water supply.⁶³ Due to conditions set by the World Bank in 1999, Cochabamba's municipal water supply was taken over by a multinational consortium, ending government subsidies and allowing for privatization of water.⁶⁴ With dramatically increased and unaffordable prices, the city's poorest were hit the hardest, unable to pay for their daily water needs. A series of protests ensued, and despite arrests and a heavily censored media, the government was forced to revoke the water privatization legislation. Following the return to a non-privatized water supply, there were public hearings to establish democratic planning and management. According to Shiva, this is an example of a successful "water democracy" because: the power of people's democratic will helped to reclaim water from corporations and the market, while fighting the supposed inevitability of corporate control of an essential resource like water.⁶⁵

However, Cochabamba's reputation as a victory for people's will cannot necessarily be considered a triumph when the aftermath of this dispute is taken into account. The outcome did not involve the social control that protestors had been fighting for. The attempts to gain greater control of the city's water supply utility were derailed when their initial demands turned into a "proposal for social representation on the board

⁶³ Vandana Shiva, *Water Wars*.

⁶⁴ *Ibid*

⁶⁵ Vandana Shiva, *Water Wars*, 103.

of directors, previously staffed exclusively by professionals and politicians.”⁶⁶ This in turn disrupted the momentum of the sustained community support, leading to a weak voter turnout and thus defeating the point of the goals of improving transparency and better access. Six years after the protests, water connection rates were less than 50%.⁶⁷ Although privatization did not prove successful in this case, the forms of management that the city reverted back to still presented the same problems of affordability of access to the city’s water supply. Using Cochabamba as such a pointed example of the failures of privatization can thus be considered a weak argument of market environmentalism critics by their failure to consider a more rounded and complete perspective. Although the detrimental impacts of inflated water prices highlights some of the major issues with water privatization, it cannot be ignored that there are still issues of access without corporate involvement. The story of Cochabamba framed as an anti-privatization story also tends to romanticize community control as having the opposite effect on the city’s people. Corporate control definitely worsened the severity of the situation, but it is critical to keep in mind that the city continued to fail bringing adequate access to its people after the water supply was taken out of the hands of the company. This is not to say that government control is more effective and responsible. Dr Eric Olsen, the former senior attorney of the Natural Resources Defense Council observed that: “People assume that there is someone in the government protecting their water supply, and that is often not the case.”⁶⁸

⁶⁶ Karen Bakker, “Privatizing Water: Governance Failure and the World’s Urban Water Crisis” (2010), 319.

⁶⁷ Karen Bakker, “Privatizing Water,” 168.

⁶⁸ Irena Selena, *Flow*.

Hesitancy to rely on governments to manage water supplies stems from a well-known history of corruption among government officials. In the water sector, this corruption manifests itself with deliberate exclusion of certain groups of people. Often, poor or indigenous communities are the ones being denied access to the country's water supply. For example, in 2000, South Africa announced a "free basic water" policy to allocate 6,000 liters of water per household per month.⁶⁹ Although the policy hinted at treating water as a communal resource by providing many homes with a basic lifeline supply of water, the reality of the situation is better understood in relation to water commodification issues, "including the introduction of harsh systems of cost recovery and enforcement that still tend to benefit upper-income households and industry at the expense of low-income households."⁷⁰ This is an example of corruption that primarily occurs in the delivery systems. Another example of deliberate exclusion of isolated groups will be discussed later in greater detail regarding the indigenous people of Botswana, the Bushmen.

Another issue of corruption is seen in places where the government is too unstable to manage its own water supply. Economist Jagdish Bhagwati, asserts that democratic politics do not always allow for "equal play to all groups." He claims that governments are sometimes inadvertently held responsible for adversely affecting marginalized groups because of the way "powerful lobbies...capture the political process."⁷¹ This provides support for advocates of the market environmentalism approach by arguing for a need for private companies to intervene in order to avoid this type of exclusion. As private

⁶⁹ www.ourwatercommons.org, accessed April 2012.

⁷⁰ *Ibid*

⁷¹ Jagdish Bhagwati, *In Defense of Globalization* (New York: Oxford University Press, 2004), 224.

businesses, they have the capacity that unstable governments lack to increase efficiency and the incentive to deliver to those without access to water. However, this assumes that people can afford to pay for the water services. This is a speculative argument, given that it is based on the assumption that businesses are factoring in anything but the potential for maximum profit into their management decisions within a given water system. This argument forms the basis for a key critique of the market environmentalism approach.

Given that the primary goal of a private business is profit, it can be argued that managing a water supply in a sustainable manner may not be a priority. It is relevant to note the argument that maintaining a sustainable water supply is actually necessary for businesses because they are dependent on the resource to stay in business. In response to this, I would point out that businesses will often deplete a water source before moving onto another, where again, there will be no incentive to use the water sustainably. An example of this unsustainability is seen in the film *Flow*, where Nestle is pumping 450 gallons per minute from streams in Michigan for the water bottling industry. As a result, the streams and other regional bodies of water have turned into mud flats.

Another argument made against the market environmentalism approach is that there has been research indicating that involvement of the private sector is not always necessarily more efficient; they are often much more expensive for users than well-managed public sector systems are.⁷² In a World Bank Economic Review analyzing Asian and Pacific regional water companies, it was found that “efficiency is not significantly different in private and public companies.”⁷³

⁷² Karen Bakker, “The “commons” versus “commodity”

⁷³ World Bank, *How Different is the Efficiency of Public and Private Water Companies in Asia?* 2002.

A fundamental criticism of treating water as a private good is that this kind of neo-liberalization involves an “act of dispossession with negative distributive consequences that is emblematic of globalization from above.”⁷⁴ It is argued that once private companies become involved in managing a water resource, the damaging logic of the market is inevitably incorporated. Within the context of water management specifically, the market is damaging because of its incompatibility with guaranteeing citizens’ basic right to water. In any market, there will always be people who cannot afford to enter the market. So, the creation of a water market is dangerous in that it invariably will deny someone the right to water. This critique of the “damaging logic of the market” is more a critique of the system of capitalism and its focus on the market economy, rather than of the market environmentalism perspective specifically. Shiva directly applies this destructive element of the market to the water world crisis: “When development philosophy erodes community control and instead promotes technologies that violate the water cycle, scarcity is inevitable.”⁷⁵ In part, I agree with Shiva’s point that the promotion of certain industries or technologies contributes to the depletion of water sources. However, for the purpose of considering effective and practical solutions, I think it is necessary to be sure to not romanticize the notion of the commons. To reference back to Hardin’s *Tragedy of the Commons*, community control does not necessarily avoid issues of water scarcity.

In promoting the perspective that treats water as a public good, there are specific economic, political and geographical factors that indicate the potential success of applying this approach. Consideration of the context is significant when analyzing the

⁷⁴ Karen Bakker, “The “commons” versus “commodity”

⁷⁵ Vandana Shiva, *Water Wars*, 12.

potential success of private involvement in the water sector: when governments either lack the financial capacity to support necessary water projects, when the government is unstable or unrepresentative of its people, when the water resource itself is scarce and needs to be efficiently allocated via price control. The fundamental problem with treating water as an economic good is that it fails to promote the human right to water, an argument that forms the basis for advocating the treatment of water as a public good.

Water as a public or community good:

In contrast to the privatization of water, an alternative perspective of how to manage water is treating water as a public or community good. Advocates of this perspective maintain that water is not something to be bought and sold. They look to a perspective that considers the value of the commons and community instead of the market as a means of managing water supplies. The commons view of water recognizes water as a “flow resource essential for life and ecosystem health,” and something that is non-substitutable and tightly bound to communities and ecosystems through the hydrological cycle.⁷⁶ Snitow, Kaufman and Fox reinforce this approach by arguing that “public operation ensures transparency and documentation [and] it provides the opportunity for communities to work for positive outcomes through public hearings, citizen action, and elections.”⁷⁷ An example that illustrates how corporate accountability to shareholders is less effective than democratic accountability to citizens is in the case of the multinational corporation, Enron. As one of the world’s largest water multinationals,

⁷⁶ Karen Bakker, “The “commons” versus “commodity,” 431.

⁷⁷ Snitow, Kaufman and Fox, *Thirst*, 6

the collapse of Enron in 2001 shocked the trusting corporate stakeholders.⁷⁸ The scandal triggered an attempt to create models for organizational accountability, thus indicating that corporate accountability is not necessarily always effective.

Bakker argues that collective management by communities is preferable and necessary because: Water supply is subject to multiple market and state failures, so without community management, water won't be managed wisely or sustainably. There is no room for failures in a market that is sustaining people's very existence. It is argued that "conservation is more effectively incentivized through an environmental, collectivist ethic of solidarity, which will encourage users to refrain from wasteful behavior."⁷⁹ Secondly, community management addresses the fact that water has important cultural and spiritual dimensions closely articulated with place-based practices, so its provision cannot be left up to private companies or the state.⁸⁰ Snitow et al. provides examples of how intertwined cultural practices are with their access to water: "The essential nature of water is sanctified in Christian baptism, the Jewish *mikvah*, and Hindu submersion in the holy waters of the Ganges River. Muslims and Hopis have their sacred water rituals, as does virtually every spiritual group."⁸¹ Lastly, water is a local flow resource; its use and health is most deeply felt at community levels. Protection of ecological and public health only happens if communities are mobilized and enabled to govern their own resources.⁸² This speaks to the idea that people are more likely to care for a resource that directly affects them in their communities, and are able to see firsthand the immediate results of

⁷⁸ Steven Currall and Marc Epstein, "The Fragility of Organizational Trust: Lessons From the Rise and Fall of Enron," *Organizational Dynamics* 32 (2003).

⁷⁹ Karen Bakker, "The "commons" versus "commodity," 441.

⁸⁰ *Ibid*

⁸¹ Snitow, Kaufman and Fox, *Thirst*, 3.

⁸² Karen Bakker, "The "commons" versus "commodity."

poor management. Another advantage of community control is the potential for decisions to be made with consideration of local values, instead of being determined by members of a corporation, who are physically and culturally detached from the situation.

Again, I emphasize that I am not creating an idyllic community that is impervious to human fault. It is also necessary to note that even with a community that is able to fairly manage and distribute their own water source, community control does not necessarily mean everyone has access to clean water. Bakker also warns against romanticizing community control, as it is often associated with an approach that is seemingly “coherent, with relatively equitable social structures, despite inequitable power relations and resource allocation exist[ing] within communities.”⁸³ She is alluding to the fact that community control does not automatically suggest that the community exists outside the system of capitalism. Thus, capitalist societies that manage their own water supply are still subject to the exploitation of power relations among its people. She recognizes the commons as something with potential to be exclusive and regressive, as well as inclusive and progressive.⁸⁴

The term commons is used to combat privatization because it “correctly opposes a collective property right to private property rights.”⁸⁵ This illustrates the significance of typology in the way it “enables activism to be more precise, [while also] developing alternatives with more political traction.”⁸⁶ Bakker helps explain why arguments for treating water as a public good are fragmented, by pointing out that “the term “commodity”... [is] frequently mobilized by those on both the political right and left—a

⁸³ Karen Bakker, “The “commons” versus “commodity,” 433.

⁸⁴ Karen Bakker, “The “commons” versus “commodity.”

⁸⁵ Karen Bakker, “The “commons” versus “commodity,” 448.

⁸⁶ *Ibid*

seemingly paradoxical convergence that engenders ambiguous politics and makes the evolution of commons and community water-management regimes difficult to predict and interpret in practice.”⁸⁷ This highlights a significant obstacle proponents of community-based management face, and reinforces the way that particular word choices can be manipulated in their vagueness and tactfully used by all players involved in the debate.

Community control of water supplies is now often thought to be a part of the primitive, less-sophisticated past. “With the advent of globalization... community control of water is being eroded and private exploitation of water is taking hold.”⁸⁸ Managing water as a public good relates directly to Shiva’s concept of “water democracy.” When a community has achieved a “water democracy,” the water supply is assumed to be distributed equitably and is treated as a public good that all are entitled to. She outlines the nine principles of water democracy as:⁸⁹

1. Water is nature’s gift
2. Water is essential to life
3. Life is interconnected through water
4. Water must be free for sustenance needs: buying/ selling water for profit violates our inherent rights to nature’s gift and denies poor people of their human rights
5. Water is limited and can be exhausted
6. Water must be conserved
7. Water is a commons
8. No one holds a right to destroy: tradable pollution permits violate the principle of sustainable and just use
9. Water cannot be substituted

These tenets shed light on the way democracy has failed people. By violating any of these listed rights or principles, democratic institutions are failing to adequately serve their

⁸⁷ Karen Bakker, “Governance Failure, 141.

⁸⁸ Vandana Shiva, *Water Wars*, 12.

⁸⁹ Vandana Shiva, *Water Wars*, 35-36.

people at the most fundamental level of their existence. The way in which water is conceptualized within democratic institutions needs to be reworked to incorporate and adhere to these tenets. Coining the term “water democracy” indicates a need to fill an area that “democracy” is failing to satisfy. It also speaks to how treating water as anything but a public or community good fails to recognize a human right to water.

The human right to water:

The debate surrounding access to and distribution of clean water revolves around the issue of the human right to water. Water is a non-substitutable resource essential for life. This property of non-substitutability makes the water management debate so distinct because it cannot be compared to any other resource or public good. Advocates of treating water as a human right argue that a recognition of this right places responsibility on the state to provide water to all its citizens, thus preventing and eliminating a need for private sector involvement. This might also require significant government oversight of a private water market in order to insure quality, reliability and affordability of water. There are several explicitly recognized human rights by the United Nations that are based upon an assumed availability of water, such as the right to adequate food, housing, and the highest attainable standard of health.⁹⁰

Given the previous descriptions of the various approaches to managing a water supply, it is evident that there is great difficulty in implementing a “human right to water.” Gupta identify three main issues with its application⁹¹: For starters, there is a lack of explicit responsibility and capacity for its implementation. People from all sides of the

⁹⁰ United Nations, <http://www.unhchr.ch/tbs/doc>, accessed April 2012.

⁹¹ Joyeeta Gupta, “The Human Right to Water.”

debate can point fingers at one another to deflect responsibility. Secondly, water knows no boundaries. Most of the world's water supplies are transboundary, forcing different communities and governments to share a vital. Lastly, and perhaps most significantly, is the question of whether or not establishing a "right to water" will effect significant practical change. Simply recognizing a right to water still does not hold a single individual or group accountable for following through in ensuring that every person is provided adequate access to potable water. For example, in post-apartheid South Africa, the right to water was incorporated into the constitution, but has not prevented the continued inequities in water distribution.⁹² The recognition of water as a human right is a step in the right direction, but does not provide an active solution to ensure this recognition is protected and enforced.

As with any perspective, there are also critiques of the human right to water. From an ecological perspective, human rights are seemingly anthropocentric. The human rights perspective fails to recognize the rights of non-humans, in that providing a human right to water could potentially imply further degradation of hydrological systems (upon which we rely upon).⁹³ There have been legislative attempts, in the United States for example, that incorporate environmental concerns into policy: the Clean Water Act, Endangered Species Act, to name a few. The point of highlighting this disconnect between the ecological and the human rights perspectives is to emphasize how the water cycle extends beyond human use. "Ecologically unexploited water can be critical in maintaining essential ecological processes such as groundwater recharge and freshwater

⁹² Karen Bakker, "The "commons" versus "commodity," 439.

⁹³ Karen Bakker, "The "commons" versus "commodity."

balance.”⁹⁴ Humans are but one species in an ecosystem where all living things are reliant upon the fundamental element of water, so to give one priority over the other in terms of water supply is to also give preference for one species’ survival over another.

There is often a misconception about what exactly is meant by the human right to water. Bakker points out that a human right to water does not necessarily require that water is provided free of charge, despite maybe implying an “affordable basic lifeline supply.”⁹⁵ As mentioned before, this then potentially conflicts with cultural and religious views on water access. This speaks to the ambiguous language used in defining water as a human right, especially when it is described as a “social, economic and cultural good as well as a commodity” by the UN’s Committee on Economic, Social and Cultural Rights.⁹⁶

When looking at how the human rights argument fits within the larger debate surrounding access to clean water, it is critical to consider the language being used. Bakker points out that the international campaign for a human right to water is rooted in arguments of anti-privatization campaigns.⁹⁷ She provides a distinction between marketization and privatization, and emphasizes the importance of recognizing that these are not synonymous. For example, “privatization of the water supply industry in England and Wales in 1989 did not entail marketization; that is, it did not entail the introduction of markets in water abstraction licenses.”⁹⁸ Failure to recognize this distinction can diminish an “ability to correctly characterize the aims and trajectories of neoliberal

⁹⁴ Vandana Shiva, *Water Wars*, 81.

⁹⁵ Karen Bakker, “The “commons” versus “commodity,” 438.

⁹⁶ Karen Bakker, “The “commons” versus “commodity,” 439.

⁹⁷ Karen Bakker, “The “commons” versus “commodity.”

⁹⁸ Karen Bakker, “The “commons” versus “commodity,” 434.

projects of resource management reform” (Bakker 2007). Bakker explains how the formation of the human rights campaign as an anti-privatization campaign has framed the larger debate as one of anti-privatization. Arguments that attempt to protect the human right to water are on the defensive side of the debate. This then calls for an approach that is mindful of word choice when formulating pro-rights arguments. Gupta does just this by expressing a need for a shift in the discussion on access to water away from a “need” to a “right,” therefore making it a discussion of entitlement rather than charity.⁹⁹ Bakker furthers her critique of the rights debate by asserting that advocating a human right to water is a limited strategy in refuting privatization: “human rights are individualistic, anthropocentric, state-centric, and compatible with private sector provision of water supply.”¹⁰⁰

Another critique of the “rights debate” is its implication of a public/ private binary that only recognizes two options of managing water supplies: state or market control. In regards to these options of managing water, Gleick contends that government oversight of a private water market is necessary in protecting the right to quality, reliability and affordability of water.¹⁰¹ In each of these scenarios of state or market control, communities are excluded. When communities are excluded in the management process, a trend of limited access to clean water for poor or indigenous people often ensues. This is where the involvement of various non-governmental organizations (NGOs) or non-profit organizations comes into play.

⁹⁹ Joyeeta Gupta, “The Human Right to Water.”

¹⁰⁰ Karen Bakker, “The “commons” versus “commodity,” 439.

¹⁰¹ Peter Gleick, “The World’s Water.”

Involvement from outside of the private sector:

Different groups take different approaches (some beneficial, some detrimental) in their efforts to alleviate issues of poor water supply management. An example of an NGO that has proven successful in their approach to addressing issues of access to clean water is Water For People (WFP). In order to develop locally sustainable drinking water resources, sanitation facilities, and hygiene education programs, their approach involves: “Programs that last and examine entire districts and regions rather than purely households and villages.”¹⁰² One example of a successful Water For People project is in the municipality of Chinda, Honduras. WFP began their involvement in Honruars in 1997, and from 1997 to 2006, they worked with partner organizations in over 90 rural communities. Then WFP developed a “regional strategy to target specific districts and to provide everyone in these areas (communities, schools, and health clinics) with access to safe drinking water and sanitation.”¹⁰³ They worked with the partner organizations, local governments, the private sector, and local NGOs to strengthen the support for comprehensive water services, and in 2011 Chinda achieved 100% water supply and sanitation coverage for homes and schools.¹⁰⁴ Their projects work directly with the people in the affected communities, involving them in every step of the process and working towards the goal of their services eventually becoming obsolete.

A detrimental approach an NGO might take typically occurs when the organization fails to recognize the value of a sustainable project, and instead provides a technical service, like digging a well, and then moves on to the next project without

¹⁰² www.waterforpeople.org, accessed April 2012.

¹⁰³ *Ibid*

¹⁰⁴ *Ibid*

considering what might happen in the future once the well breaks and who (if anyone) will be responsible for picking up the pieces. Another approach that fails to involve the community occurs when organizations donate money to a region, without fully understanding how exactly the money will be allocated and if it will even be utilized in a way that is beneficial for the community's water issues. Although charitable donations are usually well intentioned, it is necessary to recognize that aid comes does not necessarily come in monetary form. In order for a donation or non-profit project to be sustainable, the people from the affected communities must be directly involved in the solution process. In general, with NGO involvement, there are also implications of the reliance on external intervention. This can be avoided if the involvement empowers community members by including them in the process and in the work being done throughout the project. Ostensibly, the intent of NGOs is to take it upon themselves to ensure that the human right to water is not taken over and redefined by development banks and the water industry.¹⁰⁵ They are able to do so by working within the specific context of the project's region.

Public-public parternships:

Since the early 2000's, an increasingly popular alternative to public-private partnerships is public-public partnerships. Public-public partnerships are partnerships between a government body (at the local or national level) and a group or organization from outside of the private sector, such as non-governmental organizations, non-profits, community-based organizations, public sector trade unions, or a government run

¹⁰⁵ Vandana Shiva, *Water Wars*.

authority such as municipal water utilities.¹⁰⁶ The overall infrastructural goals of public-public partnerships (PUPs) are to expand the water infrastructure, increase efficiency and equitability of services, and to develop the knowledge base and confidence among municipal workers.¹⁰⁷ In comparison to PPPs, these infrastructural goals are more aligned with the protection of the human right to water. Without involvement of the private sector (as is the case with PPPs), public-public partnerships are not motivated by a drive for profit. This in turn creates a situation where water prices are not heavily controlled, and are unable to suddenly increase to unaffordable rates.

Capacity goals of PUPs include improvements made in the administration. The objective of improving the administrative system is critical in distinguishing between PPPs and PUPs. With PPPs there is arguably little incentive and no expectation of the private company to contribute to long-term improvements in the nation's water sector, or overall infrastructure in general; these projects are relatively shortsighted in this sense. If it is an explicit goal of PUPs to seek improvements beyond the immediate distribution of water, then this approach might be considered as more long-term conscious. This is held in comparison to the implementation of short-sighted band-aid solutions in response to a complex issue.

Financially, the goals of PUPs are to develop alternative financing mechanisms, while also empowering the public operator and protecting against the privatization of a water source.¹⁰⁸ It is often the case that a government's failure to provide water to all of its citizens is due to issues of funding, thus giving them good reason to turn to the private

¹⁰⁶ "Public-Public partnerships: an alternative model to leverage the capacity of municipal water utilities," *Food and Water Watch* (2011).

¹⁰⁷ *Ibid*

¹⁰⁸ *Ibid*

sector for assistance. This assistance potentially comes with strings attached, leaving the government at the mercy of the private company or institution. The notion of developing alternative financing mechanisms might alleviate the obligation of governments to succumb to unwanted conditions that primarily cater to the company's bottom line goal of profit. An example of an alternative financing mechanism might come in the form of contributions to the involved non-profit organization. The exception to this assumed corporate intent is when corporations become involved in a water project on behalf of a commitment to social responsibility. This analysis of potential financing mechanisms indicates that the context of a region needs to be considered. One factor to be considered is the political viability of implementing a project on the ground.

There are three primary types of PUPs. One type of PUP is intra-state partnership, which is between “two municipal water providers, between a municipal agency and a national one, or between an agency and a union or NGO within a country.”¹⁰⁹ This type of PUP can enable the strengthening of institutional capacity. An example of a successful intra-state PUP happened in Costa Rica. Costa Rica's government-owned water supply operator also works with community-run rural services to provide financial and technical support.¹¹⁰ This partnership has been beneficial to those struggling to provide adequate delivery services, and has had a significant impact on increasing water supply coverage to 99% in urban areas, and 75% in rural regions.¹¹¹

Another type of partnerships is inter-state public-public partnerships (as in North-North or South-South relations): “either between public entities in developed countries or

¹⁰⁹ *Ibid*

¹¹⁰ David Hall, *Public-public Partnerships (PUPs) in Water* (2009), 9.

¹¹¹ *Ibid*

between public entities in developing countries.”¹¹² When participants in the relationship share similar operating constraints, it is often in the best interest of both parties to work together in determining what types of practices are best suited for their particular situation. Together they can discern what approaches have and have not worked and strategize how successful aspects can be translated to the partner. In South-South relationships for example, PUPs might help build upon infrastructure expansion into unserved areas “by matching municipalities that have solved this challenge with those that are still struggling.”¹¹³ An example of where this type of PUP has proven successful is in the established relationship between Uruguay and Paraguay. Uruguay’s public water company formed a partnership with the water authority in Paraguay so that they could exchange information on technical expertise and support to make improvements to Uruguay’s management approach.¹¹⁴ Due to similar geographical contexts, Paraguay was able to provide appropriate technical advice and equipment to help alleviate water distribution issues in Uruguay.

The last type of PUP is a developmental PUP, in which partners are from the global North and global South. In this scenario, water providers in the Global South work with water providers from the Global North (typically unions or non-governmental organizations).¹¹⁵ Those from industrialized nations are able to invest resources and expertise without profiting themselves, while strengthening the developing country’s water utility sector.¹¹⁶ It might, at first seem rather idealistic to assume that developed

¹¹² *Ibid*

¹¹³ Food and Water Watch.

¹¹⁴ David Hall, *Public-public Partnerships (PUPs) in Water*.

¹¹⁵ *Ibid*

¹¹⁶ *Ibid*

countries have incentive to provide (financial) support for others on the sheer basis of humanitarian aid. However, the emphasis on the fact that it is unions or NGOs that are involved from the Global North, indicates that this specific type of partnership is limited to groups that are not so tightly bound to economically beneficial involvement. What can become problematic in developmental PUPs is when the partner from the global North fails to recognize the complete situation in the region they are assisting. A study published in *Public Productivity and Management Review* asserts that private funding of non-profit organizations tends to enable the non-profit to make decisions autonomously instead of engaging in collaboration. Without public support, non-profits “avoid the individual costs of engaging in collaboration,” which in turn makes for an unsustainable project.¹¹⁷ The success of these partnerships is heavily dependent on moving past fixes that provide temporary relief, towards creating sustainable solutions. The sustainability aspect is key in order to prevent the development of a dependency on the aid organization.

The Food and Water Watch organization advocates that in comparison to private sector engagement via public-private partnerships, public-public partnerships are in fact more effective, efficient and equitable.¹¹⁸ In terms of efficacy, PPPs are found to worsen service quality, while PUPs have proved to be an effective means of meeting performance objectives and actually improving public services.¹¹⁹ PUPs are able to do so by taking advantage of the common goals between two different public actors, therefore maintaining a “more integrated approach to water resource management and having a

¹¹⁷HeeSoun Jang, “Public and Private Funding Reliance of Nonprofit Organizations” (2007), 4.

¹¹⁸ Food and Water Watch.

¹¹⁹ *Ibid*

more lasting effect on the operation of utilities.”¹²⁰ In terms of efficiency, PPPs have a history of inflating the transaction costs and water prices for its consumers, while PUPs are more heavily associated with less costly fees and more efficient delivery service. Although in comparison to the potential high costs of water in PPPs, it is worth noting that PUPs do not imply cost-free access to water. However, the equitability of PUPs stems from community involvement. With the municipality, ratepayers, community groups, and the utility participation, greater accountability of this type of partnership leads to a more equitable distribution of water resources.¹²¹ Since this relationship calls for direct involvement of people reliant upon the water management, PUPs strive to “deliver services to everyone, including people and communities that are often excluded, underrepresented or disadvantaged”¹²² This provision of services is held in comparison to the way that PPPs prioritize their goal of profit over ensuring equitable distribution of services. Widespread services do not necessarily entail widespread profit, especially if a company can get away with increasing water prices in one specific area. The expectation of earning a profit from the partnership is the main distinction between PPPs and PUPs.

Public-public relationships might be considered a half-way point between a community-based management approach and a public-private partnership approach, by combining the advantages of both. The primary advantage of employing a PPP approach is the way that it attempts to simultaneously address problems of scarcity and equity, while the advantage of community-based management is the accountability people have to manage their own resources sustainably. Essentially, “PUPs provide the collaborate

¹²⁰ *Ibid*

¹²¹ *Ibid*

¹²² *Ibid*

advantages of PPPs without the profit-extracting focus of private operators.”¹²³ Although I argue strongly in favor of establishing public-public partnerships where appropriate, I am not claiming this to be the universal solution. The viability of the success of a PUP can only be considered when the context of the region is taken into consideration.

Despite the many benefits of public-public partnerships, there are still obstacles preventing this approach from being a perfect solution to the water management crisis. One criticism of this approach is that it does not provide a universal answer to areas with urban water service issues.¹²⁴ PUPs are aimed at alleviating strains on inadequate water distribution in places where the established infrastructure is unable to do so.

Another critique of PUP is the issue of financing the projects. In partnerships involving the global north and south, the high-income country can fund projects. However, partnerships formed between two groups in the global south might struggle to fully finance the process.¹²⁵ Financial issues also indicate potential difficulties with coordination between the partners. Given that most municipal utilities operate in isolation from one another, it might be difficult for a government to identify an appropriate partner organization that will best satisfy the needs of the situation. The organization *Our Water Commons* argues that in order for PUPs to be implemented successfully on a global scale, there is a need for an international partnering mechanism.¹²⁶ I would argue that the World Water Forums might be an adequate forum to begin identifying potential partnerships, instead of focusing their discussions on treating water as an economic good. This way, representatives from governments and

¹²³ *Ibid*

¹²⁴ www.ourwatercommons.org, accessed April 2012.

¹²⁵ *Ibid*

¹²⁶ *Ibid*

organizations would already be in the same place to discuss potential approaches to water management.

Another critique is related to the role of external non-governmental organizations and non-profit organizations. It establishes a dependency of the region on external involvement, which might be not be beneficial to the development of the country's water sector. It also brings into question how these external humanitarian aid organizations identify regions or people in need of assistance. Although governments sometimes do not have the capacity to adequately address known issues within their country, it cannot be assumed that a government is always informed of areas facing water access issues. With involvement of non-private sector parties, there is less financial incentive for governments to form PUPs instead of PPPs. When the government fails to cooperate with the partner organization, the success of the project is inhibited. The challenge of resisting commercialization and corporatization of public sector utilities further complicates the potential success of PUPs. Given that a public water utility cannot be run in the same way as a private business would, the potential benefits of PUPs are put at risk.¹²⁷

The success of public-private partnerships, community control, and public-public partnerships can only be considered by analyzing the contextual factors that contribute to a management approach's viability on the ground. Given the severity of the world water crisis, it is encouraging that there are various approaches to consider. However, consideration of the human right to water inherently complicates the feasibility of implementing projects that treat water as a private good. In order to better understand

¹²⁷ *Ibid*

how human rights plays into the water management debate, we will look to the story of the Botswana Bushmen.

Chapter Three: Botswana Case study

Every afternoon for two months, when the sun was at its highest and least forgiving point, my Botswana host mom would tell me that maybe tomorrow the rain would come. Prior to studying abroad for five months in Botswana during the fall of 2010, rain meant nothing to me but green grass and an excuse to stay inside. When the rains finally arrived in Botswana at the end of September, I had an overwhelmingly visceral reaction to the immediate relief the rain brought. The entire village transformed from a seemingly lifeless brown desert to a shockingly green environment infused with life from only a few weeks of rain. Feelings of hope and anticipation for the success of crops and temporary relief from the relentless heat were drawn out by the rain's arrival. It wasn't until it rained that I understood why the country's currency and the word for rain in Setswana are both *pula*.

Rain for Batswana (the people of Botswana) means more than just an excuse to stay inside; it means hope for the survival of their crops, water running through rivers, and water for their cattle to drink. Cattle are a cultural keystone of Setswana culture; a person's worth is based on the number of cattle they own and is incorporated into nearly all ceremonies marking significant life milestones. Pauline Peters, an anthropology professor and research associate claims, "Cattle are as politically significant as they are economically and socially important to Botswana's population."¹²⁸ It is evident then that there is no separating Botswana's cattle from issues of water scarcity and distribution.

¹²⁸ Pauline Peters, *Dividing the Commons* (University Press of Virginia, 1994), 195.

Background of Botswana and Bushmen removal from land:

Botswana is a land-locked country, roughly the size of Texas, with a population of about two million. Citizens of Botswana, referred to as Batswana, are comprised of 79% Tswana, the remaining 11% are small minorities, including the Bushmen.¹²⁹ As a former British colony, Botswana gained independence in 1966 and established a parliamentary democracy. Since its independence, the nation's economy has experienced one of the fastest growth rates in per capita income in the world.¹³⁰ Diamond mining, beef processing and the tourism industry are amongst the main sources of Botswana's economic success.

Under Botswana's constitution, there is a bill of fundamental rights and freedoms, which every person in the country is entitled to regardless of their race or sex. In a report on Botswana prepared by the United Nations Human Rights Council, it is explicitly stated that all minority groups are entitled to enjoy the rights under the country's laws, and have "the right to practice their own culture, to profess and practice their own languages, [and] access to social services...to every person without discrimination."¹³¹ One such service is the provision and accessibility of potable water.

Botswana's water supply services are overseen by the Department of Water Affairs under the Ministry of Minerals, Energy and Water Resources. Water Utilities Corporation (WUC), a parastatal organization owned by the Botswana government, is responsible for providing bulk-treated water to the Department of Water Affairs for its further distribution to villages. The WUC also maintains the responsibility of supplying

¹²⁹ <http://www.state.gov/r/pa/ei/bgn/1830.htm>, accessed April 2012.

¹³⁰ *Ibid*

¹³¹ United Nations, *Human Rights Council National Report on Botswana* (Geneva, 2008), 9.

water to all of the country's urban centers. This responsibility is often difficult with the harsh environmental conditions.

In an arid and desert environment, Botswana has a history of grappling with issues of seasonal water scarcity. In response to an increase in pressure on inconsistent water supplies in the 1930's, livestock owners and colonial officials invested in deep wells with motorized pumps.¹³² In doing so, investors hoped that people could maintain their existence on land that was becoming increasingly less and less livable. Peters addresses some of the issues associated with the introduction of boreholes (drilled holes in the ground to bring up water):

These so-called boreholes alleviated overall scarcity and reduced seasonal fluctuations in water supplies, but they also raised new issues of access and management. Debates over responsibility for the construction and maintenance of boreholes and pumps took place within existing institutions and also gave rise to new ones. At the same time, changes in the spatial and temporal configuration of water supplies led to new struggles over access to both water and pasture.¹³³

The Bushmen are the indigenous people of southern Africa who have inhabited Botswana and its neighboring countries for tens of thousands of years. In 1961, the Central Kalahari Game Reserve (CKGR) was created as a reserve to protect the indigenous people and what the Botswana government's tourism board refers to as the: "traditional hunter-gatherer way of life, without intrusion or influence from the outside world."¹³⁴ After about 30 years, the reserve was opened for self-drive and organized tours.¹³⁵ Subsequently, in 1997, 2002 and 2005, nearly all of the Bushmen were relocated to reservations outside of the CKGR. According to Survival International, a human

¹³² Pauline Peters, *Dividing the Commons*, viii.

¹³³ *Ibid*

¹³⁴ <http://www.botswanaturism.co.bw/ckgr.php>, accessed April 2012.

¹³⁵ *Ibid*

rights non-profit organization, “their homes were dismantled, their school and health post were closed, their water supply was destroyed and the people were threatened and tucked away.”¹³⁶ Why the Bushmen were asked to leave their land is a point of contention, and is explained differently by various perspectives from within the country. There are many, including Pauline Peters, that correlate the discovery of diamonds on the land with the dismissal of the Bushmen. Peters asserts: “The discovery and exploitation of diamonds and other minerals explains the meteoric rise of the former poverty-stricken protectorate to the top of the World Bank’s list of African states ranked according to gross domestic product.”¹³⁷ Diamonds are an integral part of the nation’s economy, and as it is a developing country striving to move into the First World, un-mined diamonds can be perceived as wasted potential for national growth. The removal of the Bushmen is thus perceived as a contribution to the greater good of the country and its economy.

Another justification made for the removal of the Bushmen from their land is a desire to keep people’s living establishments separate from national parks. The tourism industry is another significant contributor to the country’s economy, so there is high motivation for maintaining a pristine and natural area that further promotes the Kalahari Game Reserve as a tourist destination. With people living in the park, the area immediately becomes a place that is no longer “wild” or “untouched,” with humans disrupting natural processes. This perceived problem underlines the notion that people are separate from nature. The President of Botswana at the time of the Bushmen’s removal, Festus Mogae told news reporters: “The Central Kalahari Game Reserve is for

¹³⁶ www.survivalinternational.org, accessed April 2012.

¹³⁷ Pauline Peters, *Dividing the Commons*, 29.

animals, not people.”¹³⁸ Once the relationship between people and their environment is severed, an appreciation for water as a necessity is also lost. If water is not recognized and valued as an indispensable resource, approaches to managing the world’s water supply will not be adequate or equitable.

A final presumption about the reasons for the Bushmen’s removal is something I heard first-hand from Batswana during my semester abroad. Compared to some of the countries surrounding Botswana and most African countries in general, Botswana has a relatively stable economy and government, and is considered an overall peaceful country. Since their independence from England in 1966, their emergence into the global economy and participation in the market has established the country as one that is rapidly developing out of the Third World. Speaking from personal experiences, my own impression of Batswana national pride lies in a grey area that certainly indicates the country’s transitional period. There is still an overwhelming sentiment of pride and respect for both Setswana culture and being a nation of Africa. This pride though is also coupled with a frequent emphasis of the differences between Botswana and the rest of Africa, based on the country’s peaceful tendencies and the way their economic development makes them stand out as a nation. Their high self-worth is based on the strides the country has made to overall improvements on the quality of life, establishing themselves as modern global citizens. Given that the Bushmen are a small minority in the country, there are some government officials and citizens, who perceive the Bushmen as “primitive” people, whose relatively uncivilized ways of living reflect poorly on the image of Botswana as a “modern” nation. From this perspective, there is a desire to

¹³⁸ www.survivalinternational.org, accessed April 2012.

prevent tourists (from the developed world) from making assumptions of Batswana's primitiveness based on the tourist's exposure to the Bushmen during their safari trips. A push for the Bushmen to resettle elsewhere forces them to assimilate to the lifestyles of (western) educated, English-speaking people, and consequentially leads to abandoning their more "traditional" lifestyles. The Botswana government does not recognize or admit to any degree of embarrassment caused by the Bushmen.

Regardless of the reason for the Bushmen's departure from their native land, they were faced with overwhelmingly pressing problems once they were relocated onto outside reservations. These issues include a spike in HIV/ AIDS rates, alcoholism, drug use, and high rates of depression.¹³⁹ While they were eventually permitted back onto their native land by taking the Botswana government to court, they were simultaneously denied access to an essential water borehole.

Despite the Bushmen being legally allowed to live on their ancestral land, the government used access to water as a means of preventing them from inhabiting the land. This implies a failure to recognize water as a human right. Setting aside the humane aspect of denying people of this essential resource, there are also significant cultural implications. How can an indigenous group maintain their livelihoods and traditions without the fundamental support of water? This quickly becomes an issue that threatens the disappearance of a culture that is tens of thousands of years old.¹⁴⁰

¹³⁹ *Ibid*

¹⁴⁰ *Ibid*

The Bushmen go to court:

The Bushmen maintain that the reason for their removal from the CKGR was to enable the government to mine diamonds on the land. On February 12, 2002, individuals representing the Bushmen came to court to bring issue to the government's discontinued provision of basic and essential services to the Bushmen living in the CKGR as of January 31, 2002, which includes (but is not limited to):

- i. The provision of drinking water on a weekly basis
- ii. The maintenance of the supply of borehole water
- iii. The issuing of special game licenses
- iv. The allowance of the Appellants to enter the CKGR without an issued permit¹⁴¹

The applicants were under the impression that they would at the very least be consulted prior to any resettlement decisions were made. Based on the 1986 National Settlement Policy there was a "legitimate expectation that services would not be cut unless and until either the residents had relocated of their own free will or the Policy was revoked...[in addition to the expectation that] they would be consulted before the services were terminated."¹⁴² It is even an explicit goal of the CKGR government official's management plan to ensure that "communities with traditional rights are able to benefit from the sustainable utilization of wildlife resources and to try to minimize conflicts between communities and the reserves."¹⁴³ Communities within the CKGR were supposed to have been allowed the opportunity to participate in and benefit from future development of the Reserve. The fact that they were excluded from this process arguably led to the inadequate provision of water.

¹⁴¹ Court hearing: Botswana (2002).

¹⁴² Court hearing: Botswana (2002), 39.

¹⁴³ Court hearing: Botswana (2002), 42.

Given that the CKGR is located in the Kalahari Desert, water scarcity plays a significant role. The 1998 National Settlement Policy indicated that “settlements with a population of 150 to 249 people were to be provided with potable water while those with a population of less than 150 were to be provided with basic services on a mobile basis *where feasible*.”¹⁴⁴ This indicates an apparent issue of asserting that communities with less than 150 people are not entitled to the provision of water, while discriminating against nomadic groups of people. It also illustrates why the human rights debate needs to be framed as a right instead of a need, therefore creating a discussion of entitlement rather than charity. The feasibility of providing adequate water supply also speaks to another perspective arguing that people should not be settling in areas where the environment is unable to support human communities. Regardless of this argument, the Bushmen’s poor living situation eventually took them to court.

The Bushmen’s participation in court is a complicated and arduous process, stemming from the fact that they exist within a system outside of capitalism. Although the Bushmen live in relative isolation, they still maintain relationships with the Reserve employees and other government officials. The Bushmen’s alternative ways of living (in comparison to capitalist societies) leads to high rates of illiteracy, minimal English speaking abilities, and a limited understanding of Botswana’s judicial system. The court judge indicated a failure of the applicants (the Bushmen) to present “properly prepared papers” that can be legally processed by the court.¹⁴⁵ This indicates a process that only accommodates those who are literate and with an education that provides them with the knowledge of court procedures. People from outside the capitalism system, such as

¹⁴⁴ Court hearing: Botswana (2002), 40.

¹⁴⁵ Court hearing: Botswana (2002), 4.

indigenous communities or populations that are isolated from the capitalist world, are unable to wholly participate in these processes. This is not justification for ignoring their entitlement of satisfying their needs in respect to fundamental human rights.

The overall issue with expecting the Bushmen to work within the Botswana government's westernized system is complicated by their status as a minority. On the one hand, they are a minority population within the country, so there is an expectation of all Batswana residing within the country's borders to abide by government policies (including court regulations). Despite the fact that the Bushmen tribe has been established long before the country's independence or current government formation, the western world considers people within a nation's boundaries to be citizens of the country's government. How then, should the indigenous people of Botswana be treated, and how can the government fairly address their needs? Should there be different protocols for dealing with the Bushmen than the way the rest of the nation is dealt with? There are cases elsewhere in the world, like in the United States, where consideration of indigenous tribes (Native Americans) as "independent, sovereign nations" is complicated when confronted with issues of environmental justice or land use. In the case of Botswana, the court chooses to allow the use of "oral evidence" to avoid issues of improperly filed claims by those who are unfamiliar with the established system in place.¹⁴⁶ The court's recognition of the necessity for the Bushmen to voice their complaints is indicative of the recognition that water issues are too significant to allow for issues of miscommunication.

¹⁴⁶ Court hearing: Botswana (2002), 6.

Another significant issue with the use of Botswana's judicial system is the difficulty the court has in determining who the applicants, or those being adversely affected, are. For the sake of the court clearly identifying who the outcome of the trial will impact and determining what they are legally entitled to, there is no way of getting around the need to determine exactly who the applicants are. The compartmentalization of western thought indicates a need to define and categorize everything in order to see due justice served. Western cultures are heavily dependent on unambiguous identities or definitions in order to pursue their (formulaic) capitalist practices. What this school of thought fails to recognize are the people who do not necessarily fall within one rigid category in terms of their national or cultural identity. This complexity cannot be used as a justification for the denial of people's human right to water.

Despite these biases with the judicial system of Botswana, I would argue that the court made note-worthy efforts to accommodate the claims being presented by the Bushmen. For example, in addressing claims made about the status of the Bushmen reserves both inside and outside of the CKGR, the court sent out officials to inspect firsthand the living conditions and water availability.¹⁴⁷ The Permanent Secretary of the Ministry of Minerals, Energy and Water Affairs took part in this process and claimed that no mining had taken place within the CKGR because the diamonds found there were not economically valuable.¹⁴⁸ I question the credibility of the Ministry of Minerals, Energy and Water since the department itself is responsible for maintaining resources that require specific (and potentially conflicting) attention. Thus, I wonder if the Ministry would have motivations for wanting to exploit the valuable resource of diamonds at the cost of

¹⁴⁷ Court hearing: Botswana (2002), 11.

¹⁴⁸ Court hearing: Botswana (2002), 20.

relocating people. In line with this critique, there were many attacks on the court procedures made by various parties in the public media, including BBC.

Human rights groups were quickly drawn to the trial, attracting the attention of some international news sources, such as BBC and the New York Times. Survival International, a non-profit human rights group, was a driving force in increasing public attention to the case and helping the Bushmen throughout the legal process. Given that the Bushmen are Botswana's poorest citizens, and this court case was the longest and most expensive in the country's history, Survival International's support helped finance the case for two years.¹⁴⁹ Their involvement in the case ensured that the Bushmen's voices were heard and that their constitutional rights to their land were not violated. However, various Botswana did not necessarily appreciate survival international's involvement. President Mogae indicated a resentful sentiment felt by the government with regards to the non-profit's assuming involvement: "No, you don't know [what they want]. I am their country man [the person who represents them], not you. I know better."¹⁵⁰ This points to how the presence of an outside non-profit in an already hostile environment can put further strain on the situation. Here, I would argue that it is seemingly inappropriate for either the Botswana government or any non-profit organization to claim authority of determining what is best for the Bushmen. However, the involvement of Survival International enables the Bushmen to be part of the process and discussion about the future of their people; it provides an avenue for people who would otherwise not be able to financially afford to do so.

¹⁴⁹www.survivalinternational.org, accessed April 2012.

¹⁵⁰ *Ibid*

Those who were relocated were compensated by the government with “five herd of cattle or 15 goats, to assist them in starting a new livelihood.”¹⁵¹ By deciding the need for the Bushmen to start a “new livelihood,” the Botswana government is further diminishing the minority’s autonomy. Although the court acknowledges the need to provide compensation that is practical and relevant to the people receiving it, it is still problematic to provide compensation in general. It assumes that wealth is the only factor necessary in considering the relocation of people, and fails to recognize people’s emotional or physical attachment they may have with the land. This relationship to the land cannot be sustained without access to water. The compensation was provided under the condition that the applicants would then renounce their claim on CKGR land and would refrain from returning. However, there were many instances of Bushmen returning because of a lack of understanding of the agreement. As mentioned before, most people were illiterate, evidenced by the fact that most thumb-printed instead of signed forms in court. The court hearing indicates that there should have been a more adequate explanation given concerning the exact provisions of the compensation agreement, instead of creating an ineffective and pointless agreement. The hearing also reinforces the Botswana government as sole “owners” of the country’s water resources.

Conclusions

Placing the Bushmen’s story within the theoretical framework of water management helps identify how a region’s context shapes the necessary approach to equitable water distribution. The Botswana government failed its people by not being able to provide adequate drinking water to all of its citizens. The complicated

¹⁵¹ Court hearing: Botswana (2002), 396.

relationship between indigenous communities and a nation's government is complicated because of conflicting ideals. It requires the indigenous people to be treated as the nation's citizens, while simultaneously being sensitive to cultural differences. The Bushmen's struggle to gain access to water is indicative of how government appropriation of a natural resource does not necessarily protect its citizens' right to water.

Although it is speculative, it is necessary to analyze the potential success of privatizing the country's water sector, and whether this could have been beneficial to the Bushmen. Having analyzed the political, economic, geographical, and cultural context, the following is a specific policy recommendation for Botswana.

I argue that private companies might open up additional boreholes within the CKGR region because of the potential to exploit profitable tourists and tourist companies. However, I do not think that this would benefit the Bushmen because of their inability to afford user fees. As mentioned in Chapter II, the bottom line of private business is profit. So, unless private companies were to act as part of their social responsibility initiatives, there would not be much incentive to bring access of water to the Bushmen since corporations are not looking to accept alternate forms of payment to money. I argue then that the Bushmen would still be excluded and denied access from their drinking source.

The story of the Bushmen illustrates a situation where it is appropriate for multiple actors from the public sector to work together in alleviating issues of water distribution. I argue that the situation surrounding the Bushmen's access to water might have been adequately addressed with the implementation of a public-public partnership. Despite the desert environment, the government was able to provide water for the rest of the country. Their failure to extend this service to the Bushmen speaks to the

complicated nature of the government's relationship with them. The country's infrastructure is established, but the development of the water sector is critical. If an organization from the not for profit sector, such as Survival International, was partnered with the Botswana government, the human right to water might be better protected. Although this is still a hypothetical argument, the outcome of Survival International's involvement indicates that this approach can be considered a viable option. Participation from such a non-profit group would serve as a means for communication between an indigenous, underrepresented population in the national government and Botswana officials implementing policies. The partnership would not need to be a permanent one; as the needs of the Bushmen become gradually imbedded in Botswana policy, the non-profit's services would no longer be necessary. This is not to say that public-public partnerships are a universal solution that can be applied in any area where water is inequitably distributed. The Bushmen's story is an example of where a potential PUP may have protected the human right to water. Conflicts over the borehole bring notice to the theoretical questions of who "owns" water? Can or should people even be allowed to own water?

Conclusions:

*It's about power, it's about which sectors of society, which countries, which governments, which corporations are going to control the blue gold of the future.*¹⁵²

The world water crisis calls for a re-examination of the ways in which we think about and manage water. I am not suggesting that there is a single universal solution. Instead, I argue that considering a region's context is necessary in developing adequate solutions to fairly distribute water and to protect the human right to water. Context is the most critical part in reworking the approach to the way water is managed. It is necessary to avoid getting stuck in the theoretical abstractions concerning management approaches. I argue for a need to consider the viability of these theoretical frameworks that treat water as a public or private good, by using a lens that incorporates the specific geographical, political, economic, and cultural context of the region. While context is the necessary determinate, I also agree that almost invariably, the solution to fair water management practices lies in the realm of treating water as a public good, which might include the establishment of a public-public partnership

In looking to the future of the world water crisis, the approaches implemented will shape the degree to which the crisis is worsened or relieved. In doing so, we will be faced with answering questions that challenge the way we conceptualize water as a resource: Is private sector involvement incompatible with the human right to water? Who owns water and do people even have the right to own water? Although there is no clear answer to these questions, my responses are attempts to protect the human right to water. Upon establishing any market, let alone a water market, there will always be people who

¹⁵² Irena Selena, *Flow*.

are unable to enter or buy into the market. Thus, because of the very nature of water as an un-substitutable resource, the privatization of water will almost always violate the human right to water.

In regards to questions on the ownership of water, I argue that it is not something to be owned, but instead, a resource to be managed. The world's water resources are varied and form the basis of life. As long as corporations violate a person's right to water by profiting from this necessary resource, control or ownership of water remains in the corporation's hands. Water is understood as a managed resource when the users themselves are not only considered, but are also involved in the management process. The issue is not just that everyone needs access to water, but also that everyone needs access to *clean* water.

To imagine a world that continues to implement inappropriate and inadequate water management solutions is to imagine a world racing towards self-destruction. I am however, optimistic that change in the way we conceptualize water is possible. People's movements are already happening throughout the world with notable recognition in the media. If communities are coming together to create fair and ecologically sustainable water systems, then there is hope for all areas with water access issues as well. While the context of every community differs, the right to water should not. This approach involves placing value on water beyond its commercial or monetary value. Recognition of water's inherent value and this fundamental right will in turn elicit more fair policies of water allocation. We, like the Earth, are 30% mass, 70% water; the time for protecting the human right to water and the world's water resources is fast upon us.

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