

Using Advocacy Coalition Framework to Understand Water Policy in the Global South

**THE INCREASING CALLS FOR A HUMAN RIGHT TO WATER
AND PARTICIPATORY GOVERNANCE IN WATER POLICY**

by

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Submitted to the Graduate Faculty of the
Graduate School of Public and International Affairs in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

University of Pittsburgh

2019

UNIVERSITY OF PITTSBURGH

GRADUATE SCHOOL OF PUBLIC AND INTERNATIONAL AFFAIRS

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University of Pittsburgh, 2019

The historical pendulum between public and private sectors and mixed econometric outcomes of recent private sector participation in water management indicate that decision making of water policy is very much a political process rather than an economic or technical based one. Consequently, it gets more important to understand how water policy is formulated and implemented and under what political influences, as well as what institutional arrangements in the processes of bidding, monitoring, negotiating, and regulating have been attempted, succeeded or failed. This study aims to answers to these questions by assessing four cases in the Global South: Cochabamba (Bolivia), Uruguay, Johannesburg (South Africa), and Manila (Philippines), where the government implemented either or both private sector participation and re-municipalization in past decades. By employing the Advocacy Coalition Framework, Stakeholder Analysis, and Discourse Network Analysis, this study analyzes the coalitions which hold different policy core beliefs on water, their strategies to translate their beliefs on policy making, and institutional arrangements to adjust the policy after internal and external events. The content analysis with secondary data collected by Nexis Lexis and two interviews with experts were employed to obtain in-depth understanding on the cases. The study concludes that grassroots civil society organizations, which call for a human right to water and participatory governance, have increased their political leverage by forming powerful coalitions in water management policy subsystem. Their calls have been reflected in new constitutions in Bolivia and Uruguay, and new institutional

arrangements in Johannesburg and Manila, to acknowledge the responsibility of the state as a water provider and leader of water conservation and to foster more institutionalized civic spaces in water management.

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Acknowledgements

First, I would like to thank the Graduate School of Public and International Affairs for affording me the great opportunity to pursue my PhD in Energy and Environmental Policy.

This study would not have been completed without help from my Dissertation Committee, each member of which has provided me extensive personal and professional guidance and taught me a great deal about both scientific research and life in general. I am very grateful to my adviser, Dr. Marcela Gonzalez Rivas, who, despite immense difficulties in her life, never gave up advising me and kindly offering me her valuable time and expertise. Her strength has greatly inspired me to finish my study under different difficulties in my own life. I would also like to express my special gratitude to Dr. Louise Comfort. After years of working with her, I confidently say that she is the best teacher. She deeply cares about students' lives and has provided me her best guidance in both career and life issues. I'm highly indebted to Dr. Mitchell Small for his continuing support from Carnegie Mellon University to University of Pittsburgh. It was invaluable to have him in my corner when I switched my major from engineering to the field of public policy. My appreciation also goes to Dr. Paul Nelson who has shared with me his experience and knowledge on a human right and development. His life path crossing over non-governmental sector and academia encouraged me to pursue the topic of this thesis.

Finally, I would like to thank my parents for their endless love and prayer on me. Huge thank you to my beloved family, colleagues, friends and neighbors for countless supports. I would love to name each of them unless they are too many. I sincerely appreciate the loving God for His unconditional graces.

1.0 INTRODUCTION

To understand how water management policy has been made and implemented is the interest of this study. Historically, state governments and private companies have been main actors in water management. Previous literature, therefore, mainly focused on the evaluation of respective outcomes between public and private sector management models. This study, however, instead of focusing the roles of public and private sectors and their technical and financial impacts on water service, will pay more attention to three factors: 1) coalitions based on policy core belief, 2) internal and external events which make the policy subsystem unstable, and 3) institutional arrangements to support water policy implementation. To begin, this study reviews the history of water policy and supporting economic theories that have shaped previous water management policies with respect to greater or lesser roles of government and market. Secondly, this study summarizes econometric outcomes of water privatization in literature, which have guided the agenda of this study. Thirdly, four case studies, Cochabamba (Bolivia), Uruguay, Johannesburg (South Africa), and Manila (Philippines), will be analyzed to understand the three factors under the Advocacy Coalition Framework, Stakeholder Analysis, and Discourse Network Analysis. The findings of this study comparatively drawn from the four cases are presented in the Chapter 4 Comparative Analysis.

The findings of this study will redound to the benefit of society considering that coalitions with different policy core beliefs on water play important roles in policy making and implementation in water management. This study, by applying Advocacy Coalition Framework, Stakeholder Analysis, and Discourse Network Analysis, attempts to acknowledge various stakeholders at different sectors and jurisdictions that were previously not considered as powerful

in the field of water management. In addition, this study adds more explanatory power to the Advocacy Coalition Framework by providing a timeline of each variable in the framework. This way helps researchers who apply the Advocacy Coalition Framework to present a wide range of variables they capture and the causal relationship among the variables in a dynamic way rather than a static way. In sum, the greater demands for understanding coalitions of multiple stakeholders, their core beliefs on water, and their relationships justifies the need for more holistic approaches to water management rather than solely relying on public and private sectors. Thus, governments who apply the recommended approach derived from the results of this study will be able to proceed to execute processes of reconciling different core beliefs and pulling essential political supports to lead to successful policy outcomes.

1.1 HISTORY OF WATER MANAGEMENT POLICY AND SUPPORTING THEORIES

In history, the main actors of water service have fluctuated back and forth between public and private sectors. During 18th century, private companies were the main drivers of water infrastructure development in industrialized countries like Europe and the United States (U.S.) During this time, lack of public capital and business motives combined with rapid urban growth to draw private companies into water service (Prasad, 2007a). However, in the early 19th century, the countries started to regulate and municipalize water entities due to unsatisfactory water service from private companies and because of public health concerns (Prasad, 2007a). For example, in the U.S., 60-percent of piped water systems were privately owned in 1850 (Cutler et al., 2006). This share declined to 30-percent in 1924 after severe cholera outbreaks in 1832 and 1835 which

motivated municipalization of water service in big cities as well as the establishment of Public Health Act in 1848 (Cutler et al., 2006). In industrialized nations, the public management model was perceived as the remedy for market failures such as externalities and monopolies.

Contrary to the experiences of Europe and the U.S., the roles of private and public actors in developing countries are dependent upon the colonial history of each country (Gandy, 2006). The ex-French colonies in sub-Saharan Africa mostly adopted the French model of involving the private sector in water services in the 19th century (Gandy, 2006). In ex-British colonies including India and Lagos, British private capital was instrumental in setting up the first centralized water supply system. Yet, the lack of financial support for developing water system led to an explosion of a popular uprisings against private water companies (Gandy, 2006). Subsequently, in the early 20th century, many colonial countries resented foreign ownership of private firms after the colonial legacy and such nationalization was justified as a means to overcome decades of colonial exploitation (Prasad, 2007a). In developing countries, these justifications were coupled with arguments that public ownership and management facilitated “economic independence” and planned development which was central part of state formation process in the post-colonial period. Therefore, by the late 1970s, public ownership of water entities became common in both developed and developing countries for different reasons, public health concerns and economic independence, respectively, and it experienced a period of popularity in late 19th and early 20th centuries (Prasad, 2007a).

In the 1990s, the second march towards privatization was triggered by three main drivers: 1) Thatcher’s privatization policy; 2) the ensuing global emphasis on free market policies led by international donors; and 3) the fall of communism. The first driver of water privatization was Margaret Thatcher’s privatization policy launched in England in 1979. Her policy is based on

fundamental theorem of welfare economics, focusing on the advantages of the private management model. According to welfare economics, a competitive equilibrium is Pareto-optimal which means no other allocation of resources can make someone better off without making someone else worse off. Under such a competitive equilibrium assumption, the society would be better off as privatization creates a free (less government), populist (better society), pragmatic (effective) and more productive business-oriented world (Savas, 1987). This pro-market theory has also shaped the approaches of major international donors and financial institutions, both of which are other drivers of water privatization. They address global emphasis on free market policies in that water sector privatization could attract more financial investment and provide more efficient management model for delivering services compared to the state (Yarrow, 1999). The World Bank and the International Monetary Fund, for example, have spread the idea of a private management model through the conditionality of their lending process (Grusky, 2001; World Bank, 1993). The third driver of water privatization in the 20th century was the collapse of communism in the former Soviet-bloc countries and Eastern Europe. Privatization symbolized an ideological shift where societies moved from communism to market economy (Crawford et al., 1995). As a result of these three drivers, water privatization spread rapidly until 2000 in the U.S., Asia, Latin America, and Africa as a means to reform the public sector, increase infrastructure investment by developing capital market, and improve water access and management efficiency (IMF, 2007; World Bank, 2009).

The concept of water privatization is associated with neo-liberal reform strategies that emphasize market-oriented reform to achieve four major objectives: 1) to achieve higher allocative and productive efficiency; 2) to strengthen the role of the private sector in the economy; 3) to improve the public sector's financial position; 4) to free resources for allocation in other important

sectors such as social policy (Kessides, 2004; Robison et al., 2005; Sheshinski et al., 2003). In practice, this school of thought implements privatization as a mean to practice full-cost recovery, fiscal discipline, investment and financial liberalization, deregulation, decentralization, and eventually a reduced role of the state. Under the neo-liberal reform strategies, the water sector has been re-designed and evaluated to be commercialized, marketized, modernized, financialized, and corporatized to allow private sectors to participate in water ownership and management (Bakker, 2007; Bayliss, 2014; Kessides, 2004; McDonald et al., 2005a).

Critics of water privatization claim that the argument of market superiority and efficiency is made based on strong assumptions that there are no externalities in production or consumption, that the product is not a public good, that the market is not a monopolistic structure, and that information costs are low (Ballance et al., 2005; Megginson, 2005). They argue that once these assumptions are violated, the case for private sector participation becomes less compelling and more complex. Their argument lies on the fact that the water industry is naturally monopolistic and therefore does not fit into standard economic theory regarding competition. In the situation of monopoly and unusual water market, competition could be available, but its benefits would be minimal (Ballance et al., 2005). In this view, proponents of state ownership and management have theoretically justified government control in three principal ways (Megginson, 2005): 1) it allows pursuit of social objectives, not just profit maximization; 2) it responds to market failures; and 3) it responds to asymmetric information and incomplete contracts.

While the debates over the roles of public and private models in water management were ongoing, the experience of many developing countries in reality showed that they failed to attract private funding for infrastructure investment, faced massive increases of tariffs, and created additional burden on the poor (Prasad, 2007b; World Bank, 2006). Consequently, public roles for

infrastructure investment continued to be important, and international donors started to pay more attention on Public-Private Partnerships (PPPs), which arrange different responsibilities and roles of private and public sectors in terms of ownership, building, financing, and operation and management, depending on each entity's needs and capability as shown in Table 1. Table 1 shows various forms of PPPs in terms of allocation of responsibilities of public and private sectors in the water sector (OECD, 2009).

Table 1. Allocation of responsibilities for Public-Private Partnerships (PPPs) options

	Service Contract	Management Contract	Lease/ Affermage	Concession	BOT or DBO*	Joint venture	Divestiture
Asset ownership	Public	Public	Public	Private/Public	Private/Public	Private/Public	Private
Capital investment	Public	Public	Public	Private	Private	Private/Public	Private
Commercial risk	Public	Public	Shared	Private	Private	Private/Public	Private
Operations/ maintenance	Private/ Public	Private	Private	Private	Private	Private/Public	Private
Contract duration	1-2 years	3-5 years	8-15 years	25-30 years	20-30 years	Infinite	Infinite
Source of remuneration of operator	Municipality	Municipality: fee is fixed or based on performance	Operator collects user fees: Lease: fee paid by municipality Affermage: revenue shared	Users	Municipality	Users	Users
Examples	Mexico City Chennai	Johannesburg Uruguay Amman	Cartagena Côte d'Ivoire Senegal	Manilla Cochabamba Gabon Jakarta	China India Malaysia México Morocco	Cartagena Netherlands Chongqing Sino French Water Supply	England and Wales Chile

*BOT and DBO: Build-Operate-Transfer and Design-Build-Operation types

Source: OECD, 2009

When it comes to water privatization, the term of privatization usually covers the transfer from public to private in terms of management and service operation. Note that the term is not always accompanied by the change of asset ownership. It is not common to fully privatize water and sewerage system, with ownership transferred from the state to private company. Ninety-two percent of contracts with private sector made between 1991 and 2007 fell into the categories of management contract, lease, concession and BOT (OECD, 2009).

Not long after Public-Private Partnership programs were implemented in the water sector, several highly visible contracts, such as Cochabamba and Buenos Aires, ran into difficulties that led to the early termination of contracts and cancelation. The World Bank reported that 22 contracts out of 228 awarded to the private sector between 1991 and 2007 were terminated early following conflicts between the government and the operator and 18 contracts were expired and not renewed (World Bank, 2009). Another measure from the Public Service International (PSI) reported that 180 contracts were terminated early or not renewed and that water service was fully returned from the private company to public hands between 2000 and 2014. Similarly, the Transnational Institute (TNI) reported that 235 cases of water re-municipalization occurred between 2000 and 2010 in 37 countries, including high, middle, and low income ones (TNI, 2015). They claimed that the number of cases doubled in the 2010-2015 period compared with 2000-2010. While private sector participation has continued to be observed in the water sector and encouraged by major international donor agencies, the re-municipalization of water service has been a more prominent trend both in the global North and the global South since 2000. The term “re-municipalization” in this study is broadly used to depict the replacement of the private sector’s management and service operation with direct public provision by a public authority. Figure 1 shows the number of re-municipalization cases reported by the PSI as of 2014 (PSIRU, 2014) .

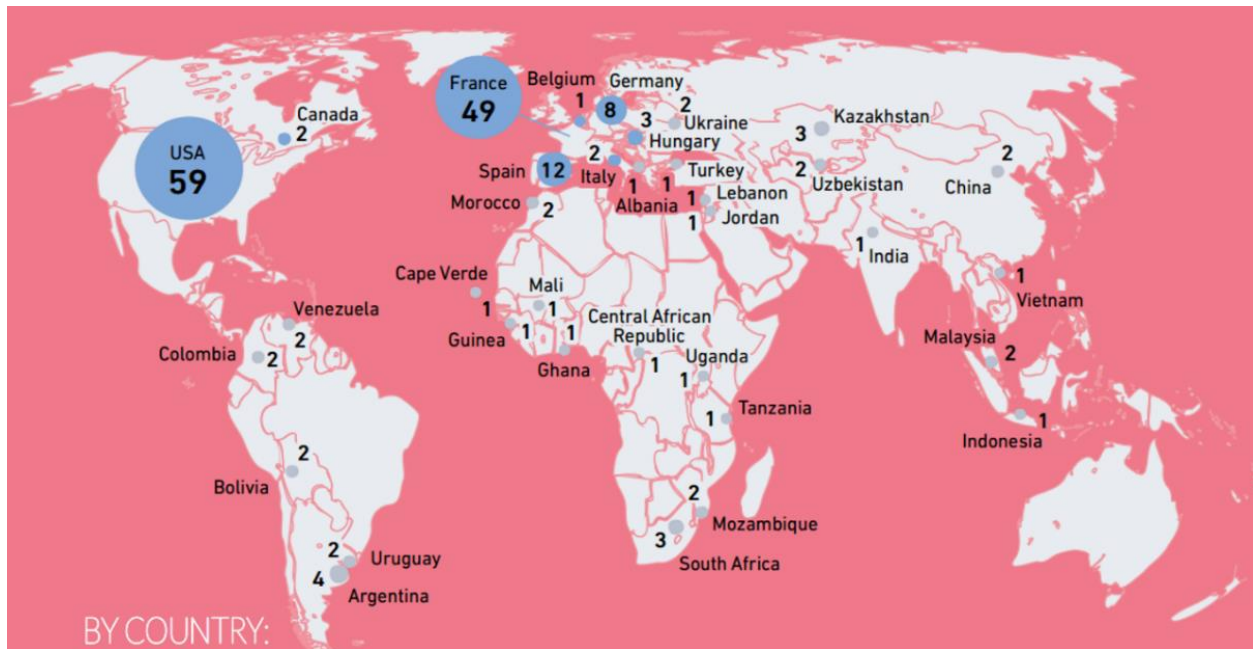


Figure 1. The number of cases that water was turned back to public hand after privatization

Source: Public Service International, 2015

1.2 OUTCOMES OF PRIVATE MANAGEMENT MODELS IN WATER SECTOR

There has been much research on the subject of private sector participation in water management that focuses on quantitative outcomes such as child mortality as a proxy of water quality and access, service improvement in terms of provision and availability, cost-effectiveness, tariff increase, and labor productivity (Araral, 2009; Bel et al., 2008; Galiani et al., 2005; Kirkpatrick et al., 2006; Lobina et al., 2000; Merrett, 2004; Shandra et al., 2011; Wallsten et al., 2002). For example, Wallsten and Clarke study the outcomes of private sector participation in water supply in Africa in the mid to late 1990s (Wallsten et al., 2002). They report that service coverage was increased under the private operation model and conclude that private sector participation could improve service provision. However, they note that only focusing on one

measure, such as increasing service coverage, may lead to a faulty conclusion on the superiority of private sector participation because there may also be offsetting service difficulties and especially higher charges when supplies are privatized. Another study from Bel and Warner (2008) analyzes the cost of water production run by private companies since 1970, and claims there is no benefit of cost savings from private sector participation given monopolistic markets absent any competition and high transaction costs with incomplete contracts (Bel et al., 2008). Similarly, Kirkpatrick et al., reviewed econometric evidence on the impact of water private sector participation in Africa using a range of performance measures including water availability, labor cost, production cost, operating cost, number of connections, total volume of water, capital utilization, and consumer charges. They report that water privatization had higher labor productivity and production efficiency, but failed to prove their superiority on cost performance compared to state provision (Kirkpatrick et al., 2006). The similar conclusion was drawn by Suárez-Varela et al. They examine Spanish water facilities at municipal level and report that private management is more efficient in the use of labor input, mainly because of the technological restrictions faced by public management units, such as legal and institutional restrictions, but failed to prove higher efficiency of private management at operational costs (Suárez-Varela et al., 2017). In addition to production and cost efficiencies, another measure on the comparison between private and public management is water conservation. A study from Homsy reports that municipalities with government-owned water utilities adopt more sustainability measures than those with investor-owned service through inter-departmental coordination (Homsy, 2018).

These analyses are valuable attempts to evaluate the impact of water privatization using econometric indicators. Yet, such indicators are not easily measurable within the confines of the public vs. private water debate, especially given insufficient data collected and publicly available

in the Global South. As a result, those studies assess the respective outcomes of the public vs. private model, and generalized outcomes of various PPP models have been consequently very difficult and controversial. In sum, many researchers agree that the outcomes of the private sector participation model in water management largely depend on local context and politics associated with particularities of each country and city (Bakker, 2007; Kirkpatrick et al., 2006; Larbi et al., 2006). It is argued that there is no systematic optimal choice between public and private delivery and other factors such as market structure, industrial organization of the service sector, and government management, oversight and regulation are much more important.

1.3 OBJECTIVES OF THIS STUDY

Previous discussion on the historical pendulum between public and private sectors and lessons from previous literature on the outcomes of private sector participation indicate that water policy making is much more a political process which does not necessarily follow econometric measures. Therefore, it is less important who owns, operates and manages water service and to what extent. What is more important is to understand how water policy is formulated and implemented and under what political influences, as well as what institutional arrangements have been attempted, succeeded or failed to support the water policy in the processes of bidding, monitoring, negotiating, and regulating. This study aims to answer to these two questions by assessing four cases in the Global South: Cochabamba (Bolivia), Uruguay, Johannesburg (South Africa), and Manila (Philippines), where the government implemented either both private sector participation and/or re-municipalization policies in past decades. During the process of water policy changes, governments have implemented a variety of institutional arrangements to achieve

their water policy goals, which are the main subjects of this study. The overall goal of the study is to identify and articulate meaningful policy lessons and recommendations for the future of water policy frameworks in the Global South. At the same time, the rising trend of water re-municipalization in the Global South in recent years holds important lessons for future water privatization and water services models implemented in developing countries with increasing levels of urban sprawl and poverty.

1.4 THEORETICAL FRAMEWORKS

This study utilizes the concepts derived from Advocacy Coalitions Framework, Stakeholder Analysis, and Discourse Network Analysis.

The Advocacy Coalition Framework (ACF) is developed by Sabatier and Jenkins-Smith (1994). The ACF explains that a policy is made by the interaction of policy participants who strive to translate components of their belief systems into actual policy (Jenkins-Smith et al., 1994). Within the ACF, policy participants will seek allies with people who hold similar policy core beliefs and develop complementary strategies as they gradually learn more about various aspects of the problem over time and experiment with a variety of means to achieve their policy objectives (Jenkins-Smith et al., 1994).

The ACF was developed in response to three needs which lacked from previous literature in the study of policy making process: 1) the need of interpretation on the heuristic stages as an inadequate causal theory of the policy process (Jenkins-Smith et al., 1994); 2) the need of system-based theories of policy making rather than top-down or bottom up approaches in implementation (Sabatier, 1986); 3) the need of theory that takes into account on the role of scientific and technical information in the

policy process (Sabatier, 1988). To address these issues, the ACF established a set of assumptions described below (source: Weible et al, 2007):

- 1) a central role of scientific and technical information in policy processes;
- 2) a time perspective of 10 years or more to understand policy change;
- 3) policy subsystems as the primary unit of analysis;
- 4) a broad set of subsystem actors that not only include more than the traditional iron triangles' members but also officials from all levels of government, consultants, scientists, and members of the media;
- 5) a perspective that policies and programs are best thought of as translations of beliefs.

Among the assumptions, the ACF explicitly identifies beliefs as the causal driver for political behavior (Weible et al., 2007b).

The ACF has been revised several times as many case studies confirmed and challenged the framework for years. One of the major revisions to the ACF was to reformulate the pluralist system in the U.S. to corporatist regimes that are more suitable to the developing countries. To do so, the revisions included adding two sets of variables as important long-term opportunity structures: 1) the degree of consensus needed for major policy change which affects the density and membership of coalitions and coalition strategy in reaching agreements; and 2) the degree of openness in political systems because corporatist systems in the developing countries are less open, more centralized, and restrict participation. Figure 2 shows the revised version of the ACF.

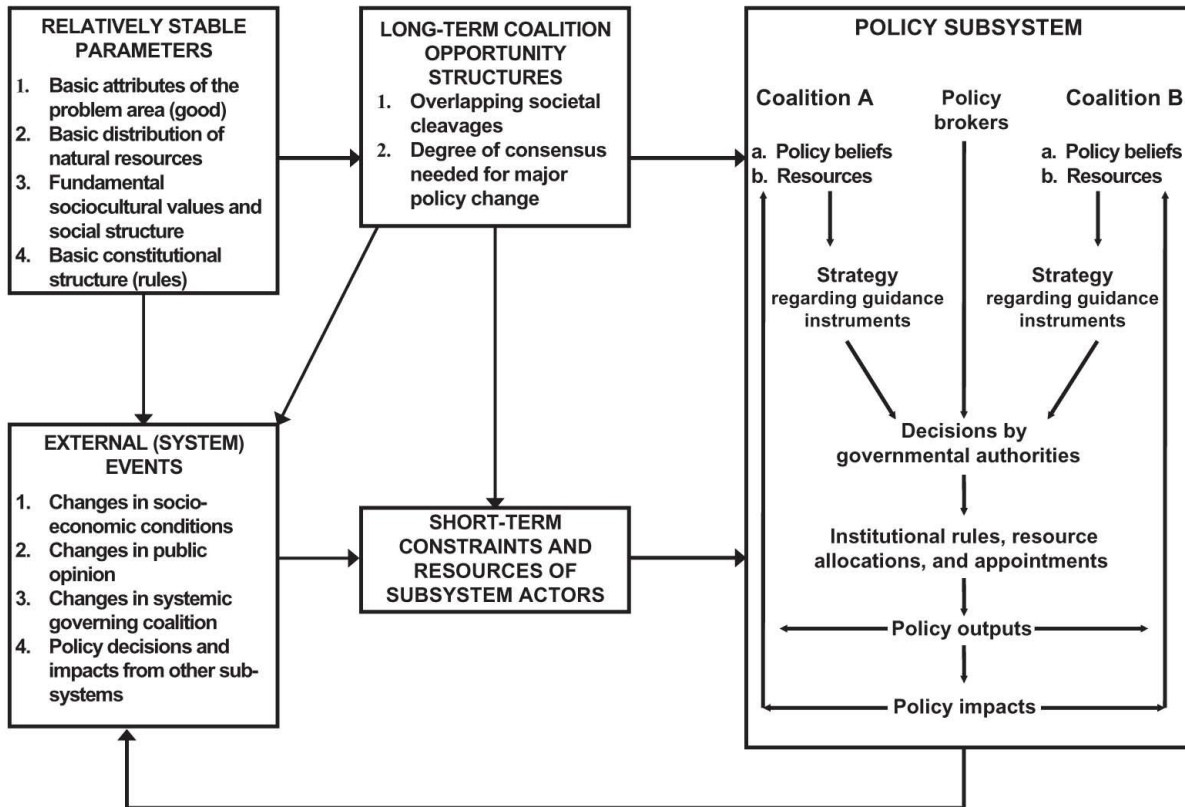


Figure 2. 2007 Advocacy Coalition Framework developed by Sabatier and Jenkins-Smith and revised by Sabatier and Weible

Source: Weible et al, 2009

The ACF identifies four paths to policy change in a policy subsystem. The below description is adopted from Weible et al, 2007:

- 1) External subsystem events or shocks including broad changes in socioeconomic conditions, public opinion, governing coalitions, and other subsystems can foster change in a subsystem by shifting and augmenting resources, tipping the power of coalitions, and changing beliefs. External events or policy failure prompt subsystem instability and the potential for rapid, major policy change;

- 2) Policy-oriented learning affects secondary beliefs or secondary aspects of the policy subsystem. The learning is defined as “relatively enduring alternations of thought or behavioral intentions that result from experience and/or new information and that are concerned with the attainment or revision of policy objectives”;
- 3) Internal subsystem events occur within the subsystem and are expected to highlight failures in the current subsystem;
- 4) Alternate dispute resolution literature affects the policy through negotiated agreements involving two or more coalitions and makes the cross-coalition learning possible.

In addition to the ACF, Stakeholder Analysis is also applied in this study. The Stakeholder Analysis is defined by identifying opportunities and constraints for calculating the likelihood that a strategy, venue, or alternative will be successful in initiating or preventing belief and policy change (Reed et al., 2009). Stakeholder Analysis addresses questions which include: who are the stakeholders to include in the analysis; what are the stakeholders' interests and beliefs; who controls critical resources; with whom do stakeholders form coalitions (Prell et al., 2009; Reed et al., 2009). Therefore, the processes of Stakeholder Analysis include following the activities: identifying all stakeholders, documenting stakeholders' needs, and assessing and analyzing stakeholders' interest and expectations.

Thirdly, Discourse Network Analysis is utilized in this study to offer a framework to analyze the interaction and polarization among stakeholders by using a combination of content analysis and dynamic network analysis. Leifeld (2013) claims that stakeholders make normative claims about policies conditional on each other, which creates dynamic network phenomenon (Leifeld, 2013). He argues there are subsystems with specific characteristics in which one

hegemonic coalition is the default, called a "normal state." In these subsystems, polarization and shifting coalition memberships interact to produce coalition turnover and major policy change. That is, a polarization into competing coalitions and the shift back to a single coalition with new members and new beliefs necessarily occurs before major policy change can take place (Leifeld, 2013). Discourse Network Analysis is employed in this study to describe such processes of predating major policy change and demonstrate how consensus and polarization may alternate to produce policy stability or change. Network diagrams among stakeholders in this study depict main stakeholders, their policy belief, and connections among stakeholders in the water policy subsystem. The color of the stakeholders (nodes) is determined by which policy core belief the stakeholder holds. The shape of the stakeholder (nodes) is determined by which sector the stakeholder represents among public, private, nonprofit, and state-owned options. Lines between stakeholders represent relationships. The relationship defined in this study is extensive, meaning that it includes any activities among stakeholders given a wide range of activities analyzed from multiple sources of content analysis. For example, if 'A' organization reported to have a meeting with 'B' organization, it was marked as an activity between A and B organizations. With the same manner, if 'A' collaborates with 'B', participates in the same meeting, conference, or coalition with 'B', makes a law or a policy that influences on 'B' under governmental hierarchical structure, or announces a position statement on the policy that 'B' created, their activities are all marked as a 'relationship' between the two. In the network diagram, stakeholders who have a strong relationship are shown in close distance with a short tie, whereas stakeholders with a weak or no relationship are shown in long distance with a long tie or no tie, respectively. If most stakeholders are all connected each other, it shows a strong relationship that facilitates effective information and value sharing within the network.

Based on the ACF, Stakeholder Analysis, and Discourse Network Analysis, the key terms described below will be used in this study.

1) The unit of analysis is a policy subsystem where policy stakeholders attempt to translate their beliefs into a policy. Subsystem is an issue-specific network where coalitions compete to dominate policymaking.

2) Stakeholders in a policy subsystem include local, state, and federal government officials, politicians, business groups, civil society organizations at grass-root, national, and international levels, researchers and scientists, and members of the media. By adopting network analysis, this study calculates betweenness centrality which measures the extent to which a stakeholder lies on paths between other stakeholders. Betweenness centrality is calculated by summing how many times a node can interrupt the shortest paths between the other two nodes of. The betweenness centrality of a node B is given by the expression:

$$\textit{Betweenness Centrality} (B) = \sum_{A \neq B \neq C} \frac{N_{AC}(B)}{N_{AC}}$$

When $N_{AC}(B)$ is the total number of shortest paths from node A to node C, and N_{AC} is the number of those paths passing through B. That is, stakeholders with high betweenness likely have considerable influence within a network by virtue of their control over information passing between others.

3) Beliefs motivate policy stakeholders to convert it into an actual policy. The ACF developed three tier beliefs: i) deep core belief which is the most stable among the beliefs and are predominately normative; ii) policy core belief which is of moderate scope and span the substantive and geographic breadth of a policy subsystem; iii) secondary beliefs are more substantively and geographically narrow in scope, and more empirically based (Weible et al., 2007).

Reflecting the ACF's concept of policy core belief, this study categorizes policy core beliefs that are observed regarding water policy into four groups, economic, social, ecological, and administrative beliefs, which are defined and adopted from Miranda et al. (2011). Miranda et al., through a thorough literature review on water crisis and water conflict issues, investigates how different actors value water, and present the four main approaches to water governance in an attempt to contribute to a greater understanding of the perspectives, interests, and main concerns of the various actors in the water sector. They also differentiates the approaches to the legitimacy of main actors, priority set up, and management models in water governance as shown in Table 2 (Miranda et al., 2011). Note that the term, "views", in the study of Miranda et al., is translated into the term, "beliefs", in this study and two terms are used interchangeably here by assuming that both determine perspectives and approaches to water-related issues. Beliefs could sound less scientific as they are the convictions that people generally hold to be true and how people expect things to be without actual proof or evidence. However, Advocacy Coalition Framework explains that beliefs, especially "shared beliefs" are critical for formulating a coalition and influential to policies and institutional arrangements in water management. For this reason, the distinct views on water discerned from Miranda et al., have been adopted in this study as a mean to explain fundamental difference in core beliefs across coalitions.

Table 2. Categorization of core beliefs on water employed in this study

	Economic	Social	Ecological	Administrative
water to be seen as	economic good	social good	ecological good	sector
main concern	Market	human beings	environment	administration
main rationality	prosperity, growth, free market	social justice	environmental justice	pragmatic resource management
main governance approach	elitist, monopoly, new public management	democratic, participative	inclusive, reflexive corporate social responsibility	concertation network
main management models	private water boards, PPP	public water boards, PUP, multi stakeholder partnerships	ecosystem management, multi stakeholder arrangement	integrated water resource management, basin management
economic valuation	market price, tariffs regulation, polluters pay principle	tariff, subsidy	non-compensable, externalities control payment	tariff, subsidy

Source: Miranda et al., 2011

Briefly, the main concern of ‘economic belief’ is market and efficiency, and it treats water as an economic good; the main concern of ‘social belief’ is human rights and low income groups, and it treats water as a social good; the main concern of ‘ecological belief’ is ecological sustainability for future generation, and it treats water as an ecological good; the main concern of ‘administrative belief’ is administration, and it treats water as a sector which needs to be managed under governments. Note that there are overlaps in governance and management approaches among different views, and it is often not easy to assign one core belief for a stakeholder following this categorization. The beliefs are sometime clear in that they appear in the media reports or organization reports, but not all the times. Therefore, it is researcher’s judgement that proceed and conceptualize activities and actions of stakeholders and assigns them into different core beliefs, which may bring a concern about the validity of this approach. Jenkins-Smith, one of the ACF

developers, admits that belief conceptualization and measures within the ACF may be incorrect (Jenkins-Smith et al., 1994). Yet, by recognizing the distinct policy core belief under which key actors and their coalitions operate, this study attempts to reveal how water policy is formulated and implemented in the presence of different core beliefs.

4) Advocacy coalitions are formed by policy participants who seek allies to accomplish the goal of translating their core belief to policy through their strategies. A coalition is a group of people who share a particular belief system and show a non-trivial degree of coordinated activity over time (Weible et al., 2007a). Within a subsystem, coalitions engage in policy learning and produce relatively minor policy change to adapt the secondary aspects of their beliefs in light of new information.

5) Policy learning occurs within and across coalitions while implementing a policy. Learning follows the routine monitoring of implementation, as members consider how policy contributes to positive or unintended outcomes and whether their beliefs are challenged or supported by the evidence and how it is presented by their competitors (Weible et al., 2007a).

6) Internal and external events increase subsystem instability and result in policy change. An internal event relates to policy failure, which may contribute to a crisis of confidence in one coalition. It may prompt a coalition to revisit its policy core beliefs, perhaps following a realization by many of its actors that existing policies have failed monumentally, which is often followed by their departure to a different coalition (Weible et al., 2007a). Another coalition can use the experience of failure to reinforce its position within the subsystem, largely by demonstrating that its belief system is best equipped to interpret new information and solve the policy problem (Weible et al., 2007a). External events vary from global recession and environmental crises to the election of a new government with beliefs that favor one coalition over another.

7) Interactions among stakeholders and their network structure reveal the presence of coalition and polarization among stakeholders as well as the absence of interactions, which are necessary to formulate consensus and policy learning within subsystem.

8) Strategies are carried out by stakeholders to influence the decisions in several political venues where stakeholders can have institutional access and opportunity to influence policymaking. Stakeholders often launch offenses in several venues and defend their interests in several venues simultaneously (Prell et al., 2009). Based on Weible and Sabatier (2007), potential strategies include elections, public referenda and decisions in legislatures, chief executives, courts, and agencies (Weible et al., 2007a). Therefore, this study identifies which stakeholders and their coalitions initiated what strategies and political venues and whether they succeeded in making their core belief a dominant paradigm through them.

9) Openness of political system is needed to build long-term coalition opportunity structures. The degree of openness of political system, depends on two things: the number of decision-making venues, and the accessibility of those venues (Weible et al., 2007b). In water management, federalism and fragmentation of decision-making system have created a highly fragmented system with multiple decision-making venues. As a result, water policy is often made separate from other resource managements and located in different units of government that contradict each other or conflict with other policy areas. Making coordinated water policy that systematically integrates natural resource protection, economic development, equity, and other factors is need for comprehensive policy making and reform that would protect a broader array of interests and provide for fuller public participation in water decision making. This study investigates whether the government of each case study has created a unit for coordination among governments at different jurisdictions and public participation in water policy as a mean to foster

accessibility to decision making venues by multiple stakeholders and therefore openness of political system.

1.5 RESEARCH QUESTIONS

Based on the concepts derived from this framework, the research aims to answer to following questions:

How water policy in the Global South is formulated and implemented under what political influences;

- 1) Who are the main policy stakeholders in the decision making?
- 2) What are their policy core beliefs?
- 3) What institutional arrangements have been set up to adapt these core beliefs?
- 4) Which coalitions practice their political leverage with what strategies?
- 5) Does policy leaning occur within or across coalitions?
- 6) Is there consensus of sociocultural values and social structures for policy change?
- 7) Is there openness of political system to move forward to a better-suited policy implementation?

2.0 METHODOLOGY

2.1 RESEARCH DESIGN

This study applies the concepts derived from the theoretical frameworks in order to illuminate the policy subsystem of well-documented cases of private sector participation and re-municipalization that have occurred in Cochabamba (Bolivia), Uruguay, Johannesburg (South Africa), and Manila (Philippines). These four cases are selected because they adopted water policy(s) more than 10 years ago and experienced a variety of internal and external events for past decades, which allows the researcher to understand the policy change thoroughly. Some of them resulted in a dramatic policy change while others brought different institutional arrangements and minor policy changes. Given the premise that it is impossible to generalize the experiences of water policy implementation in the Global South, the four cases possess geographically and socioeconomically different backgrounds, which would reveal a variety of issues in water policy making and implementation. The case studies are analyzed using the concepts described in Section 1.4 Theoretical Frameworks.

2.2 DATA COLLECTION

In order to identify stakeholders and their core beliefs in a policy subsystem, this study collects documents reported in LexisNexis (now, Nexis Uni). LexisNexis is a digital database that provides full text of newspapers, magazines, blogs, federal and state court opinions, and academic

papers. Using two key words of ‘city name’ and ‘water supply’, the database provides the most relevant reports for the processes of water policy making and implementation. This analysis focuses on the time period starting from 1990 to August 31st, 2017 and the numbers of articles collected for each case are 775 for Uruguay, 773 for Cochabamba, 2,996 for Johannesburg, and 2,522 for Manila, respectively. It is believed that the secondary data collected through the Nexis Uni have generally a pre-established degree of validity and reliability as they are published in publicly accessible reports and media. However, the use of secondary data may raise a concern on the validity of this study. The researcher of this study uses the collected secondary data as a baseline and checks the facts by comparing other organization reports to improve accuracies of data. Two interviews, one each for the Cochabamba and Uruguay cases, are conducted to improve the validity of findings from the analysis of the secondary data. The interview questions and designs were approved prior to interviews by University of Pittsburgh Institutional Review Board PittPRO (approval number: 18120109).

3.0 CASE STUDIES

This chapter discusses the subsystems of water management policy changes in Cochabamba, Uruguay, Johannesburg, and Manila. Each case study follows analyses of stakeholders, their core belief, internal and external events, coalitions and break ups, strategies, and institutional arrangements to support the water policy.

3.1 COCHABAMBA, BOLIVIA: A FAST-GROWING CITY WITH HISTORICAL WATER SHORTAGE

Cochabamba experienced the most devastating water policy change from privatization to re-municipalization. The interview with Jim Shultz, who is an executive director of the Democracy Center and lived in Cochabamba for the past 20 years and at the time of the policy change, was conducted to help the understanding of the Cochabamba water policy processes. A Bolivian friend of the researcher of this study visited the SEMAPA in Cochabamba and submitted the translated interview questions in Spanish to an administrative staff, but the staff provided no answers unfortunately.



Figure 3. Cochabamba in Bolivia

Source: Google Map

Cochabamba is a city located in central Bolivia, whose population has been growing rapidly over the past decades from 1,110,000 in 1992 to 1,455,000 in 2001 (Instituto Nacional de Estadística de Bolivia, 2010). Half of the population lives in the city area and the other half lives in the rural area. SEMAPA, a state-owned water and sewage entity, was built in 1967 and had provided water and sanitation service to the city. Yet, due in part to the historical scarcity of water in the Cochabamba Valley, only 57 percent of the city's population had potable water coverage during 1990s (Nickson et al., 2002). The remaining 43 percent gained water from other sources such as water trucks, private wells, or community water association (Nickson et al., 2002). The population in rural areas, including farmers and coca growers, has installed and managed their own

water system for agriculture and living. Due to the financial difficulties in operation, SEMAPA was contracted to private concessionaire in 1999 under the encouragement of the World Bank for their Public-Private Partnerships program and the Bolivian government experienced the strongest opposition from their citizens.

1) Policy stakeholders and their policy core beliefs

The content analysis revealed that a number of organizations participated directly and indirectly in policy formation for the Cochabamba case. Table 3 shows the classification of organizations and their core beliefs on water.

Table 3. Classification of organizations and their core beliefs on water in Cochabamba case

View on water	Local CSOs	International CSOs	Public actors	Private actors
Economic good	Civic Committee New Republican Force (NFR) Party	World Bank, IMF, Asian Development Bank, Green Peace	President Banzer Mayor of Cochabamba	AdT Bechtel
Social good	Coordinadora (FEDECOR, FAMRILES, COD, FMUC, and CSFTC) Society of Bolivian Engineers (SIB)	America's Unions (AFL-CIO) Public Services International Institute for Policy Studies Center for Agriculture and Labor Development Studies The Democracy Center Global Economy Project Citizens' Network on Essential Services International Forum on Globalization Institute for Agriculture and Trade Policy Global Exchange Inter-American Regional Secretary	President Morales	

		Global Trade Watch, Public Citizen Latin America Centre Integrated Social Development Centre Peoples' Actions for Community Transformation		
Ecological good	Bolivian Forum on the Environment	Friends of the Earth		
Sector		EU	GOB SEMAPA Super-intendency of Water (SSSB) Cochabamba government	SOBOCE ICE- Ingenious COBOSE ICE- ASTALDI

Source: own analysis

Table 3 indicates that there are numerous organizations and persons who participate in the subsystem of Cochabamba water policy making, including different levels of governments and their representatives, civil society organizations at local and international levels, international donors and private companies. The key roles of the stakeholders and their policy core beliefs are discussed throughout this chapter.

2) Water policy subsystem of Cochabamba

Among many stakeholders, the content analysis of Cochabamba case reveals that not only public actors such as the mayor of Cochabamba and the government of Bolivia, but also civil society groups such as Coordinadora and Civic Committee act very influentially in policy subsystem. Their significance is proved by their high betweenness centrality as shown in Table 4, indicating that civil society groups, though they are not institutionalized stakeholders in governmental systems, played crucial roles in the decision making of water policy. As explained

previously, the betweenness centrality is calculated following the equation in Page 17 and based on the network among stakeholders captured in content analysis. Higher betweenness centrality measures indicate stronger influence in policy subsystem.

Table 4. Betweenness centrality of stakeholders in Cochabamba water policy subsystem

Key Stakeholder	Betweenness centrality
COORDINADORA	68.183333
MAYOR	26.816667
GOB	9.766667
CIVICCOMMITTEE	9.133333
INT_CSOs	8.433333
MISICUNI	7.533333
MORALES	6.466667
WB	5.816667
ADT	5.450000
SEMAPA	4.716667
BECHTEL	3.533333
BANZER	3.283333

Source: own analysis, using R software

Figure 4 shows the key stakeholders and their interactions with other stakeholders within Cochabamba water policy subsystem.

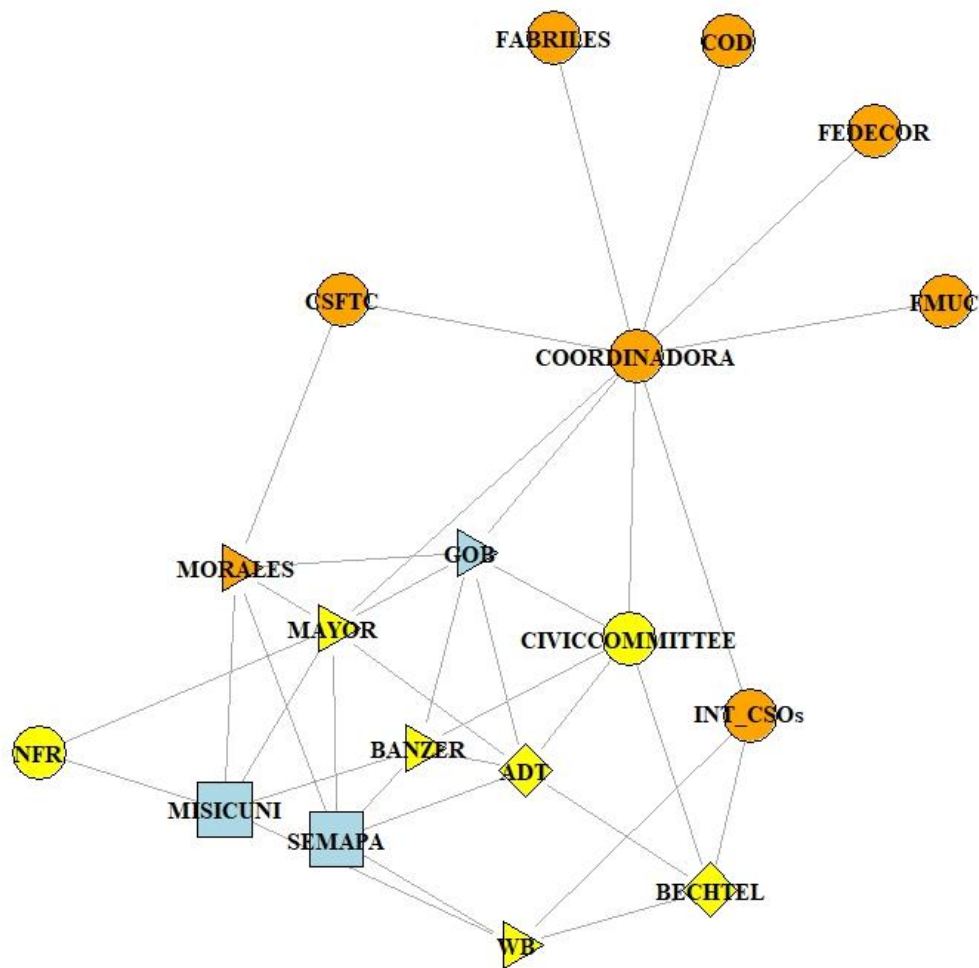


Figure 4. Key stakeholders and their interactions with other stakeholders for Cochabamba case

Policy core beliefs: Brown represents the social belief; Blue represents administration belief; Yellow represents economic belief; Green represents ecological belief following Table 2/ nonprofit in circle; public in triangle; private in diamond; state-owned in square / Ties among stakeholders mean relationship as explained in Page 16

Source: own analysis using R software

Figure 4 shows that the interactions among stakeholders in the Cochabamba case are polarized between economic and social beliefs. During the SEMAPA concession, most civil society organizations, except Civic Committee, hold the social belief and called for a human right for water. On the other hand, the World Bank, President Banzer's office, and the Civic Committee hold the economic belief and called for the need of private concessions for water management. Figure 4 also reveals that there is no institutionalized space for political participation by average citizens. The two polarized groups and the absence of participatory space contributes to the emergence of disruptive protest as a mean to deliver citizens' frustration to the government during the SEMAPA's privatization. Figure 5 shows the variables captured under the Advocacy Coalition Framework for Cochabamba case.

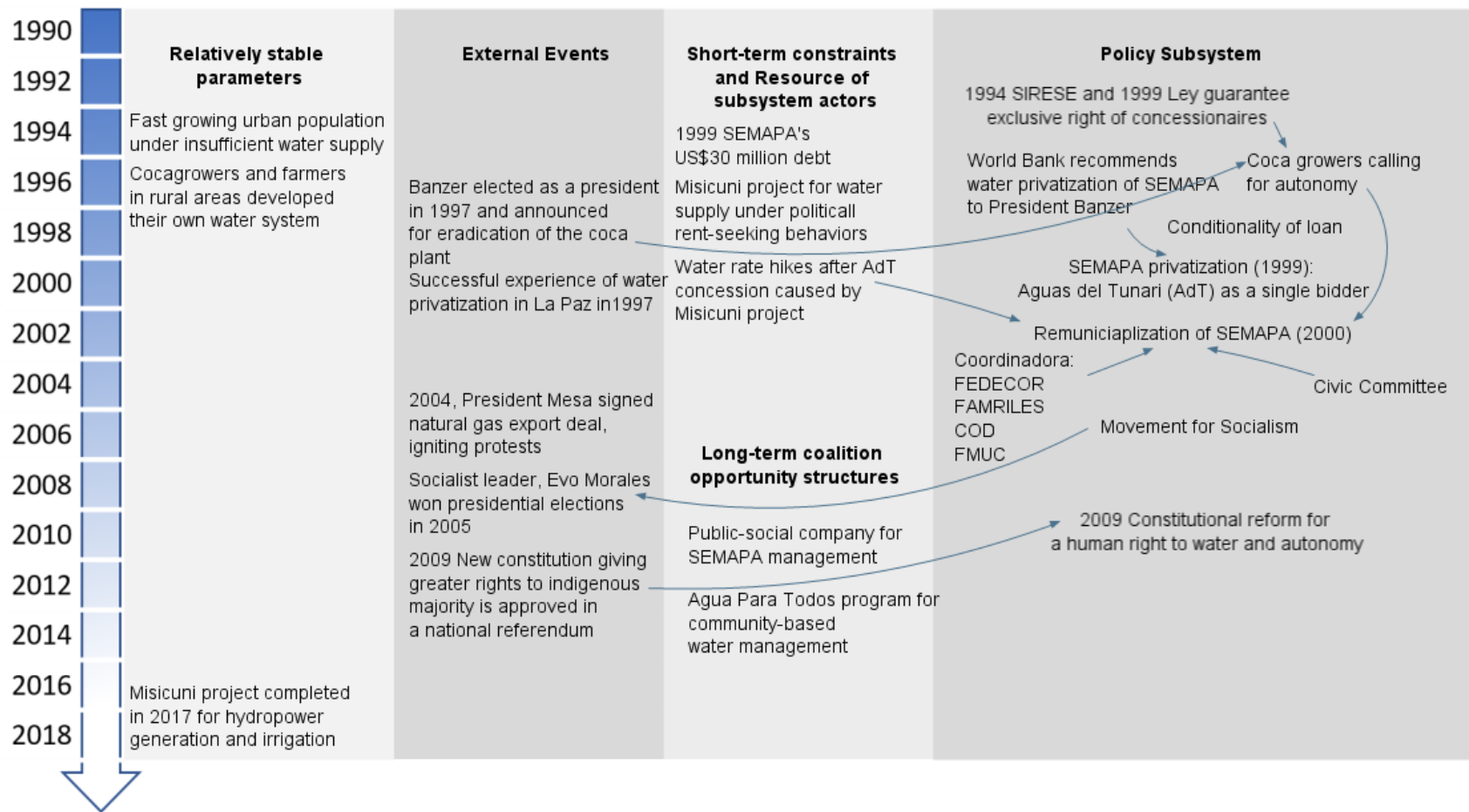


Figure 5. Variables captured under the Advocacy Coalition Framework for Cochabamba case

Arrows indicate causal relationship between variables

Source: own analysis, using AnyLogic software

3) Coalition of key stakeholders

3-1) President Banzer, the World Bank, and Cochabamba mayor for SEMAPA privatization

In Bolivia, the 1994 national water law called 'SIRESE' was enacted to centralize water management and the central government established a Super-intendency of Water (Later, Super-intendency of Water and Sanitation in 1999 water law, SSSB) to enforce nationally-integrated regulation on water management (Official Gazette of Bolivia, 1994). The Super-intendency of Water required any entity providing water services to hold a concession from the primary concessionaire. Under President Banzer's office (1997-2001), the SIRESE principle was strengthened by a 1999 water law called 'Ley 2029' in that a concession was required for any provision of water services, and continued to explicitly recognize the exclusive rights of the primary concessionaire in the area of concession (Official Gazette of Bolivia, 1999).

At the time of concession in 1999, SEMAPA had accumulated a debt of \$30 million, indicating that SEMAPA had been characterized by significant maintenance and administrative problems. Bechtel reported that 60-percent of the water pumped into the SEMAPA system was lost through leakage or theft (Bechtel, 2005). In response to SEMAPA's inefficiency and water shortage, the World Bank conditioned the approval of loans to Cochabamba in exchange for the Bolivian government's privatization of SEMAPA (Shultz, 2003). Shultz who reported details of Cochabamba water conflicts to international society at the time of concession, criticized that the World Bank required the conditionality of SEMAPA's privatization without considering the implication of it seriously (Shultz, Apr 29, 2019). In 1997, President Banzer's government recognized SEMAPA as a decentralized company of the municipality of the department of Cochabamba and ordered the restructuring of the Board of Directors as the first step toward

privatization. Two years later, the service was delivered in concession to the consortium, Aguas del Tunari (AdT) for 40 years (Bechtel, 2005). The AdT, a Cayman Islands corporation whose majority shareholder was International Water Limited, a subsidiary of an American engineering company, Bechtel corporation, was the single bidder for SEMAPA's privatization, indicating that there was no competition introduced to the water market. Other members of the AdT consortium included a Spanish corporation named Bengoa and four Bolivian companies.

The AdT began operating the city's water and wastewater system on November 1, 1999. The consortium did not buy and did not own Cochabamba's water utility or water resources (Bechtel, 2005). The concession required AdT to invest \$85 million in the first five years, and a further \$129 million over the life of the contract (Card, 2005). In addition, AdT would also assume SEMAPA's existing debt, and take on responsibility for the completion of the Misicuni project.

Internal event: Failure of building consensus on tariff increase led by the Misicuni project

In the late 1960s, a massive scheme known as the Misicuni Project was proposed to address the shortage of water supply in the Cochabamba. This project involved building a dam more than 46km away from Cochabamba which would pump water through a tunnel to be drilled underneath Cordillera mountain. Despite spending \$12 million on feasibility studies, the government of Bolivia failed to secure the bank loans necessary to finance the project, which would likely cost about \$100-300 million (Kapoor, 2015). Most of the financial institutions including the World Bank, rejected the project due to too much financial and technical risk involved (Global Water Report, 2000a). Instead, they proposed an alternative called the 'Corani project' which did not involve building the 21 km tunnel to be drilled underneath a mountain range and thus was less expensive and less risky than Misicuni. However, the completion of Misicuni project was critical

to achieve political goals of the President Banzer and the Cochabamba Mayor, Manfred Reyes Villa, because the project gained so much economic and political supports by local elites who stood to profit from the venture (Kapoor, 2015). As a result, the Corani project proposal faced significant local and political resistance and, the mayor of Cochabamba therefore defeated the project and successfully added Misicuni project on the AdT concession (The New Yorker, 2002). The winning of the Misicuni project over the Corani project revealed that the decision-making process was not solely dependent on economic and technical evaluation, but rather more on vested interests of political leaders who get support from developers and industries.

As the Misicuni project proceeded, a nontransparent tale of rent-seeking behaviors was observed during the AdT negotiation process. Woodhouse reports that SOBOCE, a La Paz-based cement company and long-time competitor, COBOSE, a Cochabamba-based company, became a Bolivian partner of the AdT concession (Woodhouse, 2003), suspiciously because SOBOCE's president was a congressman whose party controlled the Ministry of Foreign Investment at the time of negotiation (Woodhouse, 2003). Similarly, he also reports that Aguas y Energia, another Bolivian partner of the AdT, signed on to construct the Misicuni tunnel following AdT concession without a competitive bidding process because the owner of Aguas y Energia was reputed to be very close to the mayor of Cochabamba (Woodhouse, 2003). The participation of SOBOCE and Aguas y Energia in the AdT concession discloses that the bidding process for the Misicuni project lacked transparency and was associated with rent-seeking activities of politicians and business group.

Note that the inclusion of the Misicuni project was the unique aspect of the AdT concession opposed to other concessions in Bolivia such as the La Paz concession. La Paz is the capital city of Bolivia and its water management was as inadequate as the one of Cochabamba except the fact

that they did not suffer from historical shortages of water. The La Paz concession granted in 1997 involved an investment of about \$80 million over the first five years with a potential consumer base of 1.5 million people, while the AdT concession involved an investment of \$200 million over the first five years with a potential consumer base of only 500,000 (Global Water Report, 2000a). The La Paz concession focused on expansion of water service to the mostly poor residents in urban area and was negotiated with the goal of implementing a cost recovery pricing system (The Nation, 2005). Their water rate increased before the private concession was granted and did not increase after the concession for five years (World Bank, 1999b). The cost for expansion was cross-subsidized under the structure of “industrial-to-residential cross-subsidy” in that the water rate for the poor was kept low (World Bank, 1999b). Thus, the implementation of the La Paz concession was peaceful. As of the second year of the contract, the concessionaire had met its network expansion targets. Although the direct comparison between Cochabamba and La Paz cases were difficult given that the goals and conditions of the two concessions were very different, it is easy to observe that the political rent-seeking activities beyond the Misicuni project greatly contributed to the failure of the AdT concession.

Before the SEMAPA was contracted out, the World Bank predicted that meeting costs of Misicuni project would require an immediate tariff increase of 38-percent, with a future increase of 20-percent (World Bank, 1999a). Finally, the contract stipulated an expected return of 16-percent for AdT, which Shultz said was very high (Shultz, Apr 29, 2019). It was reported that during the first two months of operation, AdT increased water supply in the city by 30 percent and the water rate increased by 35 percent as stated in the contract (Special Unit for South-South Cooperation, 2002). However, the 35-percent increase in water rate was exaggerated to consumers because of their increasing water usage as well as a new Increasing Block Tariff (IBT) structure

introduced by AdT (Nickson et al., 2002) . The increasing water usage moved some users to higher-usage consumer category under the IBT system and charged them up to a 200-percent increase on their water bill (Nickson et al., 2002). This sudden price hike outraged many residents in Cochabamba. On December 28, 1999, approximately 15,000 to 20,000 people marched in the first mass protest at Cochabamba's central plaza demanding that the Bolivian government renegotiate the contract with AdT and amend the 1999 Water Law (Multinational Monitor, 2005).

3-2) Coalition of grassroots civil society organizations and their break-up: Coordinadora and Civic Committee

Figure 4 indicates that grassroots civil society groups (CSOs) got political power during Cochabamba's water conflict by forming a well-known coalition, Coordinadora. It consisted of many local organizations, but was mainly integrated with five organizations: FEDECOR (a group of rural farmers), FAMRILES (a labor union of factory workers), COD (Departmental Workers' Central of Cochabamba), FMUC (Urban teacher's federation), and CSFTC (Coca-grower's federation led by current president Evo Morales).

The FEDECOR represented indigenous peasant farmers from the rural area who had demanded the government respect their historically granted right to water. Seven years before the privatization of SEMAPA, the government sent in the military to break blockades erected by small farmers in Quailacollo, located 13 km away from Cochabamba, who were attempting to prevent SEMAPA from drilling deep wells for the city's water supply (Spronk et al., 2014b). The government and SEMAPA gave up the drilling but the conflict between the government and farmers continued for years. In 1997, the rural farmers founded FEDECOR in order to protect their water rights. The members of the FEDECOR argued that these rights were inalienable

because they had long roots because the farmers' ancestors had occupied the areas for a long time (Spronk et al., 2014b). Shultz explained that the farmers had very well-organized systems in place and had been able to manage their water system without any problem (Shultz, Apr 29, 2019).

Another key organization in Coordinadora was the FABRILES led by Oscar Olivera, who was a shoe-factory worker at the time of concession. He became a popular leader and received lots of attention from both domestic and international media during and after the protest. The FABRILES adopted a politics of social-movement unionism, which advocates greater levels of democracy and equality for all people in the rural and urban areas of Cochabamba by networking with groups of people.

The CSFTC represented coca growers in rural area and was led by Evo Morales, the current President of Bolivia. The group demanded the end of coca eradication of coca leaf sponsored by the United States. Though Ley 2029 was applied to only services of drinking water and sewage, as opposed to all water resources, it resulted in deep misunderstandings of farmers and coca growers in rural areas who were concerned that their own water system they had built and managed would be threatened and taken away by the private concessionaire. Such misunderstandings stimulated them to participate in the protest against SEMAPA privatization.

It should be also noted that the emergence of grassroots groups with indigenous people like the FEDECOR and the CSFTC implies the ongoing struggles seeking not only a human right to water, but also some level of autonomy and respect for their traditional ways of life (Arrington, 2002; The Economist, 1998; Webber, 2011). Particularly, rural farmers and coca-growers who had been threatened by President Banzer's policy for eradication of coca plants, opposed the exclusivity clause granted to concessionaires in the 1999 law and demanded recognizing the right of small groups to maintain their independence from such large-scale concessions (Democracy

Center, 2003). They feared the loss and destruction of their land and the waterscapes that would necessarily occur as a result of large-scale water transfers to distribute the water. The participation of rural farmers and coca-growers played a significant role in galvanizing the resistance to the AdT concession, but also contributed to blurring the standpoints of the protests between a human right to water and autonomy (Woodhouse, 2003).

In addition, the COD and the FMUC represented workers of department Cochabamba and urban teachers, respectively. They were also integrated into the Coordinadora and helped to organize and carry out demonstrations during the series of protests. They protested with anger against social consequences of neoliberalism policy and state-repression (Webber, 2011). While Coordinadora was widely supported from middle and lower classes, another grassroots civil society group, Civic Committee primarily represented the business and political community of the city and was generally supported by the middle and upper classes (Woodhouse, 2003).

The resistance to the concession was successful because of alliances between the Coordinadora and the Civil Committee which got widespread support among the urban population as well as rural population and campesinos. During the initial stage of negotiation with the GOB, the alliance agreed on the following: 1) freezing tariffs at the pre-concession levels of November, 1999; 2) the revision of the water law in order to respect the uses, customs, and traditional water rights of the rural population as well as of the urban water cooperatives; 3) the review and revision of the concession contract with AdT by a commission composed of representatives of government and civil society; 4) various measures to re-establish peace and stability in Cochabamba (Woodhouse, 2003). However, the alliance started to unravel as the Coordinadora stood for cancellation of concession whereas the Civic Committee favored dialogue and a revision of the contract with the AdT (Democracy Center, 2003). The Coordinadora viewed water as a social

good and attempted to prioritize the realization of a human right to water as a precondition for cost-recovery and economic development, whereas the Civic Committee viewed water as an economic good and thus valued economic principles in water management (The New Yorker, 2002). These contrasting views prove that two groups with different beliefs could not find a common ground and as a result they had publicly rejected each other as legitimate voices during the conflict.

Strategy of Coordinadora and Civic Committee: Protest in late 1999 and early 2000 that led to a policy change for the re-municipalization of the SEMAPA

Despite the break-up of two coalitions between the Coordinadora and the Civic Committee, the most prominent character of these coalition groups in Cochabamba case was that the members of the groups came from grassroots. At the early stage of forming these coalitions, international activists were not observed, indicating that the movement and protest led by the Coordinadora and the Civic Committee were initiated at the local level and their collective action got powerful enough to influence the government's decision to turn over the SEMEPA to the municipal government again. The emergence of protest and civil disobedience organized by such corporatists and proto-state actors in Cochabamba demonstrated that the absence of institutionalized avenues for political participation by the average citizens. In Bolivia, the grassroots groups had maintained a monopoly on political representation of lower classes, workers, and indigenous groups until the 1990s (The New Yorker, 2002). As a result, disruptive protest and conflict organized by grassroots coalitions emerged as a tool of political communication which attempted to deliver the discontent and frustration of citizens to the government.

In the middle of conflict between the Coordinadora and the Civil Committee, the government of Bolivia displayed an inability to handle the polarized beliefs on water. They started to exclusively negotiate only with the Civic Committee and withdrew the Coordinadora from negotiation, leaving the protest unheeded. In response to the protest, Cochabamba municipal government agreed to meet the representatives of protestors, but the central government sent soldiers to interrupt the meeting (Contra Costa Times, 2000). The central government promised to renegotiate the concession and amend the new water law but declined to reduce Cochabamba's water rates. Unsatisfied with the government's response, protestors blockaded Cochabamba's plaza in February 2000 and the Bolivian government sent soldiers who used tear gas and bullets against the protestors (Contra Costa Times, 2000). In early April 2000, protestors staged a strike again to demand the Bolivian government rescind the concession. Soldiers and protestors fought in the streets. As this trend continued, frustration with the negotiation process increased, engendering distrust among the already discontented public (Assies, 2003; Römgens, 2011). Violent clashes between the demonstrators and law enforcement resulted in 40 injuries, and five deaths, causing President Banzer to declare a "national state of emergency." This series of conflict between protestors and the government is called the "Cochabamba Water War."

After the Water War, the Coordinadora was getting popular as a symbol of democratic exercise in the global south, holding a referendum. Ninety-six percent of voters demanded canceling the contract with the AdT. This outcome, however, was not accepted by either the central government or the Civic committee, who blamed a lack of validity in the vote process (Assies, 2003). This clearly proved that the GOB refused to accept the Coordinadora as an institutionalized representative of the citizens. While the government dealt with protestors for

several rounds, the AdT was forced to leave Bolivia. Consequently, the SEMAPA regained the control of Cochabamba's water.

Strategy of the AdT: Arbitration pursued by the AdT in the World Bank's International Center for the Settlement of Investment Disputes

In 2000, the AdT pursued arbitration to recover US \$25 million in the World Bank's International Center for the Settlement of Investment Disputes (ICSID).

Strategy of international CSOs against the AdT's dispute: Solidarity actions against Bechtel

Right after the dispute from the AdT, there were many international solidarity actions. The Democracy Center, a US-based civil society organization, summarized the actions done by international organizations for Cochabamba-Bechtel case and the following contents in the Table 5 are retrieved from their website (Democracy Center, 2006).

Table 5. Solidarity actions conducted by international civil society groups

- | |
|---|
| <ul style="list-style-type: none">• The Democracy Center documents Bechtel as the majority owner of the AdT• Email protest was sent by 500 people to Bechtel demanding the company's withdrawal from Cochabamba• Solidarity protests performed in San Francisco at Bechtel headquarter• When Coordinadora hosted a conference entitled "Water: Globalization, Privatization, and the Search for Alternatives" in December 2000, a number of U.S./Canadian solidarity actors participated and declared the Cochabamba Declaration on the Right to Water |
|---|

- In September 2002, an international citizens petition, signed by 300 organizations from 43 countries, was filed with the World Bank demanding that the Bechtel-Bolivia case be opened to public scrutiny and participation, but the petition was rejected by the World Bank. Between 2004-2005, more than 300 people sent emails to the headquarters of AdT, requesting they drop the case

Source: Democracy Center, 2006

Bechtel ultimately dropped the case in 2006 in exchange for Bolivia absolving the AdT of any potential liability. A settlement was reached between the Government of Bolivia and the AdT and stated that "the concession was terminated only because of the civil unrest and the state of emergency in Cochabamba and not because of any act done or not done by the international shareholders of the AdT" (Bechtel, 2006). The protests, political venues and actions led by civil society organizations at both grassroots and international levels show that they influenced decision making in municipal water policy not only by shaping international and domestic discourse on a human right to water, but also by intervening in actual negotiations in the World Bank's International center for the Settlement of investment Disputes.

External event: Shift of governing coalition and the 2009 Constitution amendment for long-term stability of the new policy

Since 1985, the government of Bolivia had embraced the economic belief on water. At that time, President Victor Pas Estenssoro's (1985-1989) right-of-center government initiated the wave of privatization in Bolivia. Under the frame of 'New Economic Policy', the government started to deregulate and privatize state-owned enterprises including oil, gas, telecommunications,

airlines, power generation, and railroad companies over the following 20 years. Cochabamba's water privatization plan proceeded in 1999 when the central government of Hugo Banzer (1997-2001) continued the deregulation policy and led nationwide privatization under international donors' pressure to view water as a commodity.

This policy based on economic belief faced challenges as the proto-state actors like Coordinadora and Civic Committee gained political popularity in the end of 1990s. The protests against the AdT were inspired by a variety of justifications including regional pride, general anger at the government and the economic crisis, and rejection of the neoliberal economic models adopted in the national government's policies. With wide support from throughout Cochabamba's civil society organizations, the 2000 national water law exempted indigenous rural and urban water committees, cooperatives, and neighborhood associations from the requirement of holding a concession and eliminated the exclusivity clause granted to concessionaires in the 1999 law, recognizing the right of small groups to maintain their independence from such large-scale concessions (Kapoor, 2015).

The 2009 new constitution under President Morales' government enacted many progressive reforms toward a human right to water, and Bolivia has established a precedent by formally recognizing the delivery of basic services, along with participation and social control as fundamental rights. Table 6 is the brief statement of the constitution regarding water management (Constitute project, 2009).

Table 6. Brief statement of 2009 Constitution on water management

<p><u>Article 16, I.</u> Every person has the <i>right to water</i> and food.</p> <p><u>Article 20, III.</u> Access to water and sewer systems are <i>human rights</i>, neither are the object of concession or privatization, and are subject to a regimen of licensing and registration, in accordance with the law.</p> <p><u>Article 373, I.</u> Water constitutes a fundamental right for life, within the framework of the sovereignty of the people. The State shall promote the use and access to water on the basis of principles of solidarity, complementariness, reciprocity, equity, diversity, and sustainability.</p> <p><u>Article 374,</u> The State shall protect and guarantee the priority use of water for life. It is the <i>duty of the State</i> to manage, regulate, protect, and plan the adequate and sustainable use of water resources, with social participation, guaranteeing access to water for all inhabitants. The law shall establish the conditions and limitations of all the uses.</p> <p><u>Article 375, I.</u> It is the duty of the State to develop plans for the use, conservation, management and sustainable exploitation of the river basins. II. The State shall regulate the management and sustainable administration of the water resources and the basins for irrigation, food security and basic services, respecting the uses and customs of the communities.</p>
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Source: Constitute project, 2009

The 2009 constitution also recognized the rights of the nations and rural native indigenous peoples under the Article 30 as shown in Table 7.

Table 7. Brief statement of 2009 Constitution on the rights of rural native indigenous people

Article 30, 15. To be consulted by appropriate procedures, in particular through their institutions, each time legislative or administrative measures may be foreseen to affect them. In this framework, the *right to prior obligatory consultation by the State with respect to the exploitation of non-renewable natural resources in the territory they inhabit* shall be respected and guaranteed, in good faith and upon agreement.

Source: Constituent project, 2009

Based on the constitutional reform, the Morales government started to record and enshrine ancestral water rights of indigenous and campesino families and communities under the framework of the irrigation law (Globe and Mail, 2006). The new constitution brought funding and support from the central government and UN for drinking water and sanitation projects (The New Republic, 2018). President Evo Morales, a president of Bolivia since 2006, successfully advocated a human right to water and sanitation at the United Nations, who declared these to be human rights in 2010. He gained substantial financial support from the U.N., contributing to the great improvement of water service in Bolivia in general (The New Republic, 2018).

New institutional arrangements to support public management after re-municipalization

Despite the great polarized groups in Cochabamba and challenges in SEMAPA management and regulation, the local government, SEMAPA, local citizens and international civil

society groups have attempted some new institutional arrangement to adopt more participatory and community-based approaches.

1) A public-social company with a very high level of popular participation, including a popular assembly with elected delegates from all regions of the city, has been proposed and is in progress (McDonald et al., 2012; Upside Down World, 2008). This experience had a considerable impact at the national level with the enactment of the New Constitution in February 2009.

2) Agua Para Todos (Water for All), a consortium, was founded by combined efforts of the SEMAPA, a community-based Water Committee and an NGO, Pro-Habitat, with an objective to create community-owned secondary water distributions in poor peri-urban areas of Cochabamba. As of 2005, Agua Para Todos had invested 1 million US dollars, a half of which came from community resource and the other half from the municipality. The costs of installing community water pipes were met by the communities through a micro credit scheme, repayable within a year (IPS, 2005). The consortium won the 2005 SEED¹ Award in Water, Sanitation & Health (WASH) section. Though the consortium has been doing an innovative job, problems have remained with regard to continued population growth and industrialization, requiring vast quantities of water for continued human and industrial development.

3) Association of community water systems of the poor, southern zone of the city (ASICA-Sur) has secured financing from the EU to build water system in poor areas (McDonald, 2011)

4) The 2009 Constitution also contained some reinforcement to safeguard water as a natural resource as shown in Table 8 (Constitute project, 2009).

¹ SEED is a global partnership for action on sustainable development and the green economy, was founded at the 2002 World Summit on Sustainable Development in Johannesburg by UN Environment, UNDP (United Nations Development Programme) and IUCN (International Union for Conservation of Nature) (UNO, 2002).

Table 8. Brief statement of 2009 Constitution on water conservation

<p>Article 108. To protect and defend the natural resources and to contribute to <i>their sustainable use</i> in order to preserve the rights of future generations.</p> <p>Article 124. The Bolivian who engages in the following acts commits the crime of treason against the country: Violates the constitutional regime of natural resources.</p> <p>Article 380, I. The renewable natural resources shall be exploited in a sustainable way, respecting the characteristics and <i>natural value of each ecosystem</i>.</p>
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Source: Constitute project, 2009

In addition to the constitution that has promoted sustainable management of water resource, the Bolivian government also established ‘Law for the Rights of Mother Earth’ in 2010, the fundamental objective of which was to prescribe, uphold, and guarantee the co-existence and preservation of life. This law aims to recognize that nature has the same equal rights as humans and these rights should be protected and defended in the same manner. Table 9 is brief statement of the part in the law, the translated version of which was adopted from WPHNA website (WPHNA, 2014).

Table 9. Brief statement of ‘Law for the Rights of Mother Earth’

<p>Article 2. Principles: The binding principles that govern this law are...<i>No commodification</i>. For which life systems or processes that sustain them <i>cannot be commodified, nor be part of anyone’s private property</i>.</p> <p>Article 7. Rights of Mother Earth</p>

The law enumerates seven specific rights to which Mother Earth and her constituent life systems, including human communities, are entitled to...water: It is the right of the preservation of the quality and composition of water to sustain life systems and their protection with regards to contamination, for renewal of the life of Mother Earth and all its components.

Source: WPHNA, 2014

The statement in the constitution does not necessarily lead the government to completion of water conservation in practice. As increasing plans of development and fracking in Bolivia evolve, concerns have been raised whether this law would be compatible with the plans. The concern became real: the International Rights of Nature Tribunal reported the Bolivian government has violated the rights of Mother Earth and the collective and individual rights of the nations and indigenous peoples in TIPNIS case (Movement Rights, 2019). In 2008, the government hired the Brazilian company OAS to build a highway that would divide the protected area of TIPNIS without carrying out a comprehensive environmental impact assessment. The International Rights of Nature Tribunal analyzed that the case has caused deforestation and the expansion of coca leaf production, and affected biodiversity, causing the irreparable loss of natural beings (Movement Rights, 2019). This incident points out that the implementations for nature conservation and participatory governance are still in progress, but not yet matured. Nevertheless, expressing statements of water and nature conservation in the constitution could serve as the first step toward actual policy implantation.

4-5) There have been some positive signs in SEMAPA management. The SEMAPA started to allow freedom of information of its accounts and disclose its investment and revenue streams, with public hearings and direct public participation holding the agency to accountability

(SEMAPA, 2018). In September 2011, the public servants of SEMAPA signed the “Political Manifesto Decolonization of the Public Ethics and Behaviour Revolution Servants and Public Servants of the Plurinational State of Bolivia to the Bolivian people”, denoting a commitment by the public sector to offer accountability (Future Policy, unknown). In 2008, SEMAPA union voted for their new leadership who expressed their commitment to union democracy for the first time in over twenty-five years (Upside Down World, 2008).

4-6) The Misicuni project was pursued by President Morales in order to provide water for hydropower generation and irrigation and was completed in 2017 (Hines, 2018). The dam construction was financed by the Italian government, the Development Bank of Latin America (CAF), and the Inter-American Development Bank.

5) Challenges to current water policy under public management

5-1) Weak management capability of SEMAPA characterized by being not self-sustainable

Despite service and coverage improvement in general across Bolivia with the U.N.’s support under President Morales’s office², currently there are still challenges to be addressed. The biggest challenge is the unsustainable SEMAPA management system. It has not been able to create profit after privatization and re-municipalization. Their financial statements in 2015, 2016, 2017, and 2018 available on their website disclose that their costs of service and management have exceeded their earning (SEMAPA, 2018), indicating the their service has not been self-sustainable.

² The Washwatch program reported that in Bolivia, 90-percent of the total population had access to "improved" water source and 50-percent of the total population had access to "improved" sanitation as of 2015 (WashWatch, 2015).

As a result, other international companies have been unwilling to give them more loans after AdT involuntarily left (The NY Times, 2005).

The weak management capability of SEMAPA is also pointed out by Shultz during the interview. He believes the actions done by grassroots and international CSOs were successful in terms of altering politics and igniting debate on water privatization around the world, but less successful in providing water services to all to ensure access to improved water resource (Shultz, Apr 29, 2019). He said that there was a lot of interest and enthusiasm at the time of the water revolt, but it did not translate into ongoing citizen's involvement in policy making afterward. He said if he could go back to the middle of the Water War, he would have to build the team that could help carry forward SEMAPA's work better (Shultz, Apr 29, 2019).

5-2) Weak regulatory system of the Super-Intendency of Water

As mentioned earlier, the 1994 national water law established a Super-intendency of Water, SSSB, as a national regulation entity on water systems. However, several researchers pointed out that the weak regulatory capacity of the SSSB, in the form of budget constraints and lack of trained human resources, hampered the effectiveness of SSSB intervention and restricted its capacity to carry out a public relations campaign about the terms of the concession (Global Water Report, 2000b; Nickson et al., 2002). In addition, the SSSB has not been politically independent from the Bolivian government, playing passive roles in presenting citizens' needs especially during renegotiation of tariff setting; re-negotiation and tariff freezes after the Water War were agreed upon by the central government and the Civic Committee, the only civil society group that had an economic belief on water (Global Water Report, 2000b). Critics say that the government-appointed regulators in SSSB were largely ineffective in overseeing privatizations due to the

inherent tension between government and administrative oversight (Nickson et al., 2002) and left mass protestors and the government to negotiate by means of violence in Cochabamba. This issue has not been addressed and seems to be intractable until the policy stakeholders are able to provide sufficient resources and attention.

5-3) Still polarized social values: Social Unrest in 2007 caused by multiple ethnicities and their contrasting interests in Cochabamba

Top-down attempts to have citizens participate in policy making was implemented in Bolivia since its 1994 Law of Popular Participation. Nevertheless, mechanisms implemented to institutionalize citizens' participation has never been easy. This is in part because of contrasting interests among polarized citizens from multiple ethnicities and business groups. The Cochabamba Social Unrest that occurred in 2007 is a good example of the difficulty of integrating interest across a multiplicity of actors. The Cochabamba Social Unrest was caused by the conflict between the supporters of the Governor of Cochabamba, Manfred Reyes Villa, and the supporters of the President Morales. Manfred Reyes Villa was the first elected governor of the Department of Cochabamba from 2006-2008. Evo Morales has been the first indigenous president since 2006. The governor's opposition to Morales' policies angered the president's supporters and, early in 2007, demonstrations in Cochabamba escalated into violence. Thousands of indigenous peasants and coca growers from rural areas converged on the city to express support for the president's policy, indigenous political power, and a centralized state. In response, thousands of middle and upper class whites and mestizos attempted to retake control of the city (Hines et al., 2009). They sought to support traditional political parties and increase autonomy for regional departments in order to mitigate the influence of the indigenous political groups. The social unrest resulted in a

mini-civil war, where 160 people got injured and three people were killed (Hines et al., 2009). The conflict of multiple ethnicities and social groups in Cochabamba was a great barrier to implementing a mechanism of citizen's participation in water governance because their policy core beliefs are very polarized, and policy-learning and shifts across coalitions that lead to integrated policy and planning are not likely to happen in such an extremely polarized environment.

6) Conclusion

First, the dynamic change of water policy in Cochabamba from privatization to re-municipalization of SEMAPA confirms that water policies have been the results of powerful coalitions of policy stakeholders. The World Bank suggested the privatization of SEMAPA to the central government through the conditionality of their relief loan and formed a coalition with President Banzer's office and Cochabamba's mayor to translate their neoliberal structural reform approach to the SEMAPA. However, under lack of citizen's consensus on the privatization, the rate hike caused by the Misicuni project, and a strong protest led by the opposing coalition of Coordinadora and Civil Committee resulted in the return of SEMAPA to public hands. At the international level, individuals and international civil society organizations formed a coalition to demand the cancelation of Bechtel's dispute to Bolivian government and practiced their resource of solidarity. Bechtel finally dropped their case at the World Bank's International Center for the Settlement of Investment Disputes. The Cochabamba case confirms that local and international civil society organizations successfully translate their belief systems into actual policy by forming coalition with allies and by utilizing their political resources and venues.

Second, Evo Morales, a coca growers' leader who participated in the coalition of Coordinadora, became the president of Bolivia and the policy core belief of a human right to water

was reflected into the new Constitution enacted in 2009, which was a major external event to water policy subsystem in Cochabamba. After the re-municipalization of SEMAPA, more participatory and community-based approaches have been applied in water management in Cochabamba by local water committees and international civil society organizations, indicating that new institutional arrangements to support their core belief of a human right to water are in progress.

Third, despite general service improvement across the country under President Morales' leadership, the capabilities of the regulation body and the SEMAPA are still questionable in that the SEMAPA has not been able to make profit after privatization and re-municipalization. The 2007 Social Unrest of Cochabamba, where very polarized groups of people with multiple ethnicities and interests violently clashed each other, implies that a participatory approach to promote policy learning across coalition and a strong consensus would be difficult to achieve in such an extremely polarized environment.

3.2. URUGUAY: A SMALL URBANIZED STATE WITH SUFFICIENT WATER SUPPLY

Coalitions with the social belief in Uruguay used the 2004 national election and referendum as their strategies, contributing to re-municipalizing their water entity, OSE, and adding the values of a human right and environmental justice in their constitution. With successful reform experience, the OSE is leading Public-Public Partnerships with other public water service entities in Latin America. An interview with Terra Rafael, a professor at the University of the Republic of Uruguay, was conducted to help the understanding of the Uruguay water policy process.

Source: Google Map



Figure 6. Uruguay

Uruguay is the second richest country in terms of GDP per capita, after Chile, in South America and the second smallest country, after Suriname, in the continent with a population of

about three million. While its urbanization rate is over 95-percent as of 2018, one of the highest in the world, 93-percent of its territory is apt for agriculture (Index Mundi, 2018). The Montevideo Waterworks, a British water company was nationalized in 1952 and its name was replaced with Obras Sanitarias del Estado (Sanitation Works of the State, OSE). Since then, OSE has been publicly owned and operated to provide water service nationwide and sanitation everywhere except Montevideo. Montevideo's sanitation service has been under direct provision of the city whereas sanitation out of the city took place later and has since been under OSE management. With substantial development funds from international donors and public investment, OSE has achieved nearly 95-percent of the coverage rates for water supply during 1990's (World Bank, 2010). Uruguay also possesses sufficient amount of 'per capita renewable water' resources and groundwater reserves (Index Mundi, 2014).

1) Policy stakeholders and their policy core beliefs

Similar to other cases in this study, the content analysis conducted for the Uruguay case shows that there is a variety of organizations participating in policy making. Table 10 shows the classification of organizations and their core beliefs on water.

Table 10. Classification of organizations and their core beliefs on water in Uruguay case

View on water	Local CSOs	International CSOs	Public actors	Private actors
Economic good	National Party Colorado party	Asian Development Bank World Bank IMF	EU-Mercosur	Aguas de la Costa URAGUA Aguas de Bilbao Suez Development Bank of Latin America
Social good	CNDAV CDWS FFOSE Sustainable Uruguay- Program Broad Front party, Red VIDA PIT-CNT FUCVAM (Federacion Uruguaya de Cooperativas de Vivienda por Ayuda Mutua) FEUU (Federación de Estudiantes- Universitarios Uruguay) Casa Bertolt Brecht	Public Services- International Council of Canadians Public Citizen Consumer International Coordinadora Rel-UITA (International Union of Food, Agriculture, Hotel, Restaurant, Tobacco, and Allied Trades) IUF (International Union of Food, Agricultural, and Allied Workers) Polaris Institute Red VIDA German Heinrich Böll Panta Rhea Foundation	DINAGUA COASAS	
Ecological good	REDES_AT	Friends of the Earth – International		
Sector			Central Bank of Uruguay GOU Ministry of Public health OSE MVOTMA URSEA	

Source: own analysis

Table 10 indicates that there are numerous organizations who participate in the subsystem of Uruguay's water policy, especially a large number of civil society organizations at local and international levels. The key roles of the stakeholders and their policy core beliefs are discussed through this chapter.

2) Water policy subsystem

Among many stakeholders, the content analysis of Uruguay case reveals civil society groups such as CNDAV and FFOSE earn high betweenness centrality, indicating that civil society groups played crucial roles in the decision-making on water policy as shown in Table 11.

Table 11. Betweenness centrality of stakeholders in Uruguay water policy subsystem

Key Stakeholder	Betweenness centrality
CNDAV	135.90000
GOU	121.76667
FFOSE	22.25000
OSE	13.38333
COASAS	7.80000
URSEA	1.50000
MVOTMA	0.90000
DINAGUA	0.50000

Source: own analysis, using R software

Figure 7 shows the key stakeholders and their interaction with other stakeholders within Uruguay's water policy subsystem. Note that red color indicates a civic space for participation and coordination among key stakeholders, which was created after the 2004 referendum.

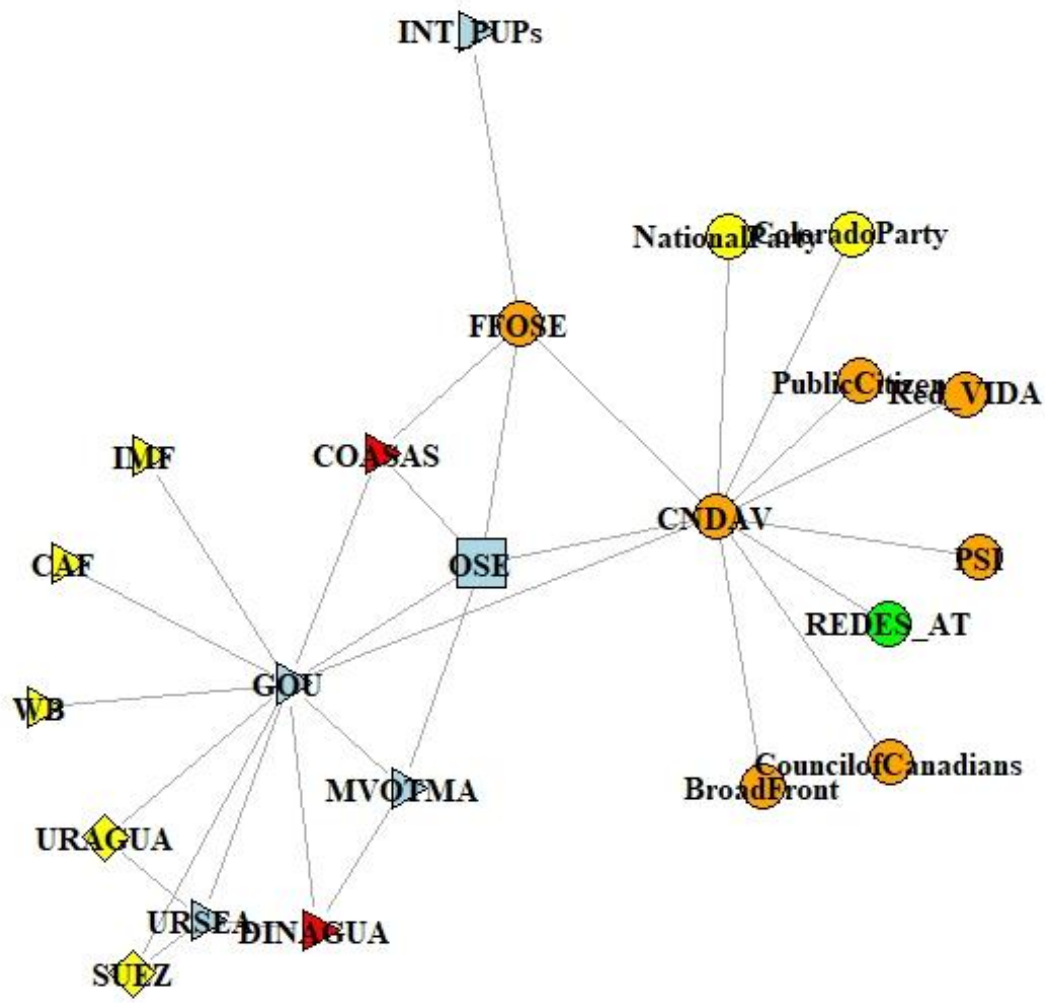


Figure 7. Key stakeholders and their interactions with other stakeholders for Uruguay case

Policy core beliefs: Brown represents the social belief; Blue represents administration belief; Yellow represents economic belief; Green represents ecological belief following Table 2; Venues for coordination and participatory spaces in red / nonprofit in circle; public in triangle; private in diamond; state-owned in square / Ties among stakeholders mean relationship as explained in Page

16

Source: own analysis using R software

Figure 7 shows that the local civil society organizations and political parties, though they hold different policy beliefs, interact under the CNDAV coalition. This strong coalition made it possible to re-municipalize the OSE through the 2004 referendum and to declare a human right to water through a constitutional amendment. The constitutional amendment leads to the creation of institutionalized spaces such as COASAS and DINAGUA for multiple stakeholders' participation and coordination among them. Figure 8 shows the variables captured under the Advocacy Coalition Framework for Uruguay case.

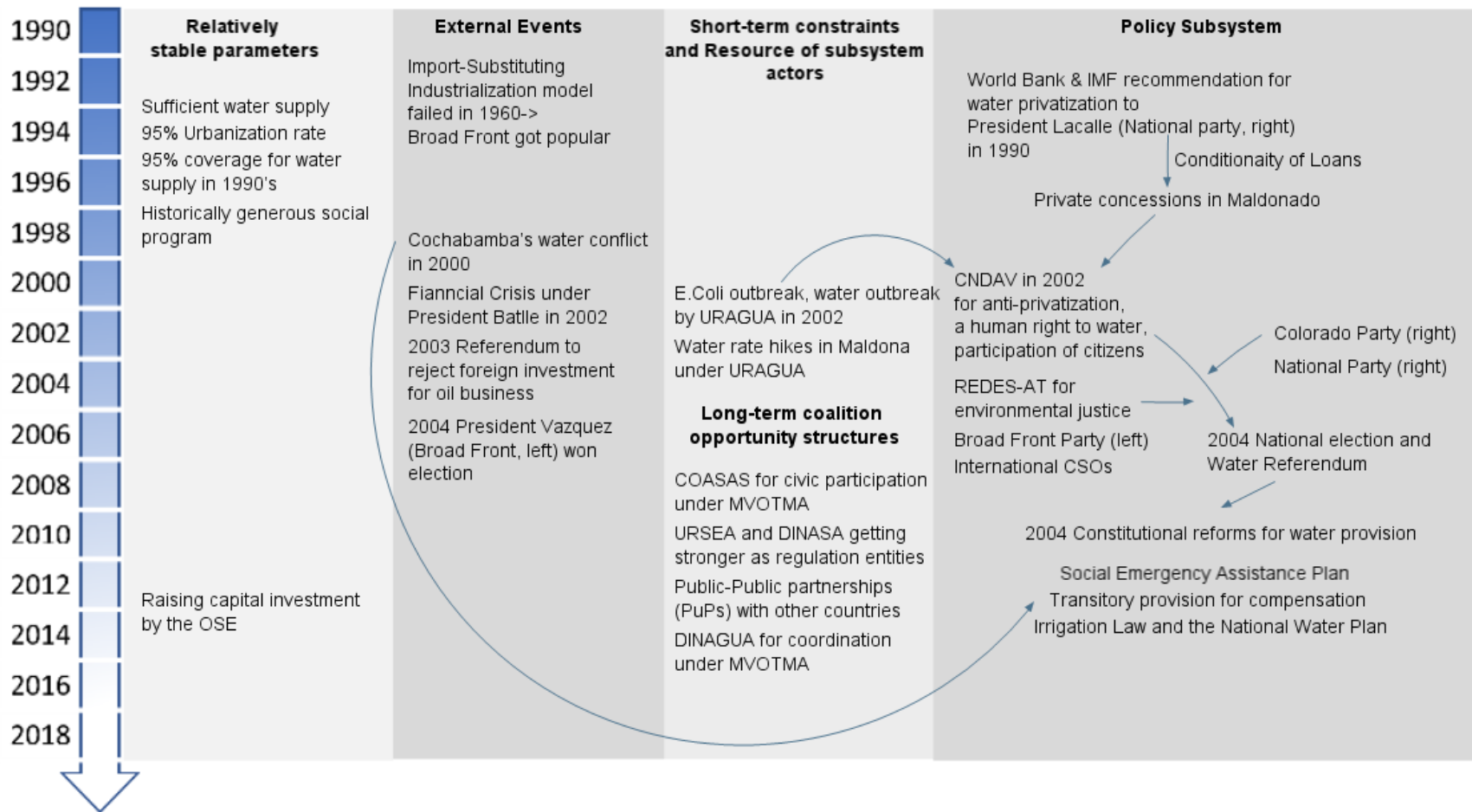


Figure 8. Variables captured under the Advocacy Coalition Framework for Uruguay case

Arrows indicate causal relationship between variables

Source: own analysis, using AnyLogic software

3) Coalition of key stakeholders

3-1) Coalition of President Lacalle's office, the World Bank and the IMF

Uruguay historically has had generous social program. After the Paraguayan War (1856-70), Batlle's administration (1903-7, 1911-15) initiated a social welfare system codified in the Uruguayan constitution. After Uruguay dictatorship (1973-85), which managed all state-owned enterprises, Uruguayan reform process was gradually started during the period of most intense reform in Latin America focusing on privatization and the dismantling of the monopolies previously managed by public enterprises in 1990s. With the objective of generating greater competition and promoting private investment and technical progress, President Lacalle (1990-1995) from a right wing-National party attempted to liberalize the economy and started to privatize state enterprises. At that time, the World Bank and the IMF recommended the government to privatize part of the water services as a means of modernizing the sector by introducing competition (Santos et al., 2005). Following this advice as well as growing pressure as a member of Mercosur³, a South American trade bloc aimed at creating a free-trade market among member countries, the government started to turn part of the water services over to two private water corporations (World Bank, 2010). The first concession was granted in 1992 to the Aguas de la Costa, a subsidiary of Aguas de Barcelona (Suez) in the eastern zone of the department of Maldonado (IPS, 2006). In 2000, OSE granted the second concession for the entire department of Maldonado to URAGUA, a subsidiary of Spanish water company Aguas de Bilbao (IPS, 2006).

³ Mercosur has created the Southern Common Market which is one of the world's leading economic blocs and fifth-largest economy. Mercosur consists of five member countries – Argentina, Brazil, Paraguay, Bolivia and Uruguay – as well as six associate members – Chile, Colombia, Ecuador, Guyana, Peru, and Suriname. Mercosur serves as a customs union and free-trade area aiming to integrate Latin America similar to the European Union.

Rafael noted that the department of Maldonado has been the wealthiest department in Uruguay with luxurious beach resorts and has needed to expand their water services for the increasing number of tourists and businesses (Rafael, Mar 28, 2019). In addition, 14 small private water operators were granted the concession for water and sanitation services between 1992 and 2000 (McDonald, 2011).

Internal event: Failure of regulating private sector's operation issues

During 2001 and 2002, several incidents happened with respect to water quality and maintenance as well as water rates in the department of Maldonado. For instance, Piriápolis, a city in Maldonado department under the provision of URAGUA, had a water main break, leaving the city without potable water for four days in January 2001 (Travis, 2011). One month after the incident, residents of Maldonado were overcharged up to 300 percent on their bills and the URAGUA had to refund the overcharges following this violation of rules of concessions (LaRed 21, 2002b). Additionally, a sewer main break occurred in January 2002 in the city of Punta del Este in Maldonado and fecal E.coli bacteria was detected in the water supply (LaRed 21, 2002b). OSE issued a public health advisory to boil all water for the Maldonado residents and URAGUA got charged for their violation over sewage treatment guidelines that caused elevated level of fecal coliform bacteria by dumping partially-treated sewage into the water supply source of Punta del Este (LaRed 21, 2002b). In addition to these water quality and maintenance issues that impacted public health, increasing water tariff triggered increased concerns toward the private companies. Since the private companies began to operate water service in the department of Maldonado in

1992, it was reported that water tariff has climbed to seven times⁴ the cost of water services in the rest of the country as of 2004 (IPS, 2004).

3-2) Coalition of National Coalition in Defense of Water and Life (CNDAV)

Despite these incidents, the Uruguayan government announced that they would grant water service of more cities to private companies in order to satisfy conditionalities of an IMF loan (IMF, 2002). It was at this time that the members of the OSE labor union (Federation of OSE Public Employees: FFOSE) and citizens formed the Comisión de Defensa de Agua y Saneamiento de Costa de Oro y Pando (CDASCOP), which became the nucleus of a nationwide civil society consortium, Comisión Nacional en Defensa del Agua y de la Vida (National Coalition in Defence of Water and Life, CNDAV) in the following year (Business News Americas, 2003). The CNDAV launched the “National Campaign in Defense of Water” with the objective of reforming the National Constitution through a public vote to recognize water as a human right.

The CNDAV was founded in 2002 as a response to the central government who committed to further privatizing water services throughout the country (IMF, 2002). The CNDAV has a special feature that it has a very heterogenous composition across social groups. There were about 30 organizations registered in CNDAV and Table 12 shows the list of organizations registered in the CNDAV (Travis, 2011).

⁴ The researcher of this study could not confirm if this rate increase reported by IPS was adjusted by inflation.

Table 12. Organizations participating in CNDAV

Organization	Description
Asociación de Remitentes	Pensioners' Association
Casa Bertolt Brecht	Progressive institute promoting German culture and language; provides institutional and financial support to Uruguayan causes
Centro de Viticultores de Uruguay	Winegrowers' Association
Comisión Barrial Zona Oeste	Neighborhood Commission, eastern Maldonado
Comisión de Defensa del Agua y Saneamiento de Costa de Oro y Pando (CDASCOP)	Neighborhood organization in fast-growing province of Canelones; precursor to CNDAV
Comisión Nacionalista en Defensa del Agua	
Convergencia Socialista	
Conosur	
Coordinadora del Barrio Sur y Adyacencias	
Consumidores del Uruguay Asociados	Uruguay affiliate of Consumers International
Docentes de la Facultad de Ciencias y Facultad de Ingeniería	Faculty of Science and Engineering, University of the Republic of Uruguay
ECOS	Foundation promoting sustainable development located in Maldonado
Federación de ANCAP	Trade union of the state energy enterprise (fuels and combustibles)
Frente Amplio - Encuentro Progresista - Nueva Mayoría	Broad Front-Progressive Encounter-New Majority. Left-of-center ruling political party in Uruguay.
FENAPES	National Federation of Secondary School Teachers
FEUU	Federation of University Students
FFOSE	Federation of OSE Public Employees. WSS utility trade union
FUCVAM	Federation of Mutual Aid Housing Cooperatives. One of the largest and most influential urban social organizations and movement in Uruguay.
Liga de Fomento de Manantiales	Manantiales Promotion League. Civic organization in eastern Maldonado province, served by Aguas de la Costa.
MADUR	Uruguayan Movement of Agricultural Cultivators
Movimiento por la Utopía	
Partido Nacional - Todo por el Pueblo	National Party-- fraction
Partido por la Seguridad Social	Social Security Party
Partido Verde Ecologista	Green-Ecology Party
PIT-CNT	Uruguayan Trade Union Central Federation

Proyecto Solidario Cultural Sayago - SODEC	
REDES-AT (Amigos de la Tierra)	Social Ecology Network-Friends of the Earth, Uruguay.
UITA	International Federation of Food, Tobacco, and allied workers—Latin American Regional Division
Unión de Mujeres del Uruguay	Women’s Union of Uruguay
Uruguay Sustentable	Sustainable Uruguay, environmental research organization working with REDES-AT and faculty of the University of the Republic

Source: dissertation Karen Faye Travis, 2011. She noted that she accessed the information from FFOSE website in 2004 which is currently unavailable as of 2019.

Table 12 illustrated that there are numerous organizations that participated in CNDAV. They represent diverse groups from environmental NGOs, trade unions, academics, businesses and consumers, neighborhood committees, and some public officials. Consequently, their concerns covered a wide range of subjects including dissatisfaction with the performance and behavior of private concessions, exploitation of water resources, lack of transparency of public utility, and/or the pressure for new privatizations from IMF loan conditionalities, and further threats arising from trade liberalization negotiations in the WTO, the FTAA, the EU-Mercosur and other free trade and investment agreements (Dugard et al., 2012; REDES-AT, 2005). However, they shared the common objectives under CNDAV to stop the privatization of water services, to guarantee a human right to water, and to advocate for the direct involvement of civil society, launching the National Campaign in Defense of Water and Life. The heterogeneity of the group provided the campaign the unique aspect that it called for not only a human right to water, but also an emphasis on environmental issues, integrated management of water resources, and public participation. They also argued that water services must be kept outside of international trade agreements like

the WTO, the General Agreement on Trade in Services (GATS), and the Free Trade Agreement of the Americas (FTAA) (Travis, 2011).

Strategy of CNDAV: 2004 national election and referendum

The CNDAV decided to utilize the 2004 national election for the reform and started to obtain signatures for the water referendum to be included in the election. The Uruguayan electoral system required at least 10-percent of voters to support the referendum of a citizen-initiated constitutional reform (Business News Americas, 2003). Despite strong political opposition from the highly influential private water companies, bottled water companies, and conservative business sectors (McDonald, 2011), the CNDAV presented 283,000 signatures and satisfied the requirement for the water referendum (Business News Americas, 2003). In the 2004 election, 60-percent of Uruguayans voted for approval of a constitutional reform that defines water as a public good and guarantees civil society participation at every level of management of the country's water resources (El Paris, 2004). After the reforms, the government changed the legal framework of water provision accordingly, which is discussed in the Institutional Arrangements section. Private operators that had previously operated water and sanitation services before the referendum were either terminated or absorbed by OSE (Business News Americas, 2005). Currently, nationwide water and sanitation services have been provided only by OSE and the Municipality of Montevideo (for sanitation).

3-3) Coalition of the CNDAV and international civil society organizations

The third coalition revealed by the content analysis in the Uruguay case is the coalition made by Uruguayan and international civil society organizations. When CNDAV ran up to the

2004 election, there were many worldwide campaigns against water privatization following the wake of Cochabamba Water War led by international CSOs such as Public Citizen, Public Service International, Red VIDA and Council of Canadians (Barlow et al., 2017; Blouin-Genest et al., 2018; Hall et al., 2004; Public Citizen, 2003a; Red Vida, 2003). For example, Public Citizen, a US-based CSO, began a vast campaign under the title "Defend the Global Commons" and has called for collective control of water resources and actions against water commodification occurring around the world (Public Citizen, 2003a). In addition, Red VIDA (La Red de Vigilancia Interamericana para la Defensa y Derecho al Agua) was formed in 2003 and launched a campaign calling for water as a public good and a fundamental human right and built a strong network in Latin America that helped the CNDAV's social mobilization (Red Vida, 2003). These international CSOs supported CNDAV by conducting research, publicizing information and media dissemination, running national and international anti-privatization campaigns, helping signature campaigns, publicity tours, networking, and garnering financial assistance to prevent commodification and privatization of water resource (Barlow et al., 2017; Blouin-Genest et al., 2018; Hall et al., 2004).

Shift of coalition: participation of opposing political parties in CNDAV

Uruguay's political party system had been historically bipartisan, dominated by the two traditional parties, the Colorado and the National Parties. The Colorado party was traditionally associated with liberalism, secularism and urban business and worker interests, whereas the National party was historically conservative, defending the interests of landowners and the

Catholic Church (Travis, 2011). Since the so-called ‘import-substituting industrialization model⁵’ got exhausted in 1960s, the Broad Front, a leftist-wing party, has grown (Bergara, 2004). Both the traditional parties and the left wing, Broad Front, have been the central mechanisms of representation and expression of political interests. When President Lacalle from the National Party, attempted to privatize OSE in the early 1990s, the Broad Front discarded revolutionary rhetoric and become more moderate and more appealing to centrist voters (Luna, 2007). In the 1999 general election, the Broad Front obtained the largest share (40-percent) of the popular vote and won the most seats in the General Assembly (Bergara, 2004).

In 2002 when the CNDAV was launched, the political climate was unfavorable to the reform. A couple of political parties, including the Movement of Popular Participation (Movimiento por Participación Popular, which later became the largest part of the Broad Front) and the Progressive Alliance (Alianza Progresista), joined the coalition, but major political parties did not join and expressed some concerns about existing concessions and future foreign investment. For example, the Socialist Party (Partido Socialista) and the Artiguista Fall (Partido Vertiente Artiguista) were concerned that the reform could increase uncertainty for foreign investors and would have a negative impact on foreign direct investment (LaRed 21, 2002a). Even the Broad Front party joined the movement, but did not enter a formal alliance with the environmental groups and labor unions fighting water privatization until January 2003 (Van Dyke et al., 2010). Then, the CNDAV announced that they had collected 100,000 signatures disapproving of outsourcing of OSE service and management to private companies, which clearly indicated that public opinion was turning against water privatization in January 2003 (McDonald,

⁵ Import-substituting industrialization model aims to advocate economic independence by replacing foreign imports with domestic industrialization products.

2011). During the 2004 election campaign, the Broad Front decided to include the water privatization issue in its election platform and simultaneously handed out leaflets on the negative consequences of water privatization as it passed out propaganda on its party's slate of candidates for office (Van Dyke et al., 2010).

In the beginning of CNDAV mobilization, ideological lines were not clear, particularly about the issue of cancellation of formerly-granted concessions. The CNDAV's proposal for the cancellation drew criticism from the ruling political parties, the Colorado and the National parties, which were concerned that the reform would authorize expropriation in the style of totalitarian regimes (LaRed 21, 2002a). At the same time, several ministers assured that the reform would not and should not affect the concession because the reform would not have a retroactive effect (IPS, 2004). However, CNDAV continued asserting that the concessions would be voided by the constitutional amendment. The continuing effort of CNDAV in domestic social mobilization and international support finally resulted in an unfavorable climate. Under growing pressure from domestic and international organizations, the fractions of major political parties, the Colorado and National parties finally joined CNDAV before the water referendum (McDonald, 2011). With broad political support, the Broad Front won the legislative and presidential elections as well as referendum in 2004. After the referendum, it was reported that the private concessions were eventually canceled, not because of the constitutional amendment, but because of noncompliance such as work delays and nonpayment of agreed upon fees to the government by the private concessionaires (REDES-AT, 2004; Santos et al., 2005). Therefore, there was no lawsuit related to the cancellation of the concessions between the government and concessionaires.

National water policy change and constitutional reform

The Uruguayan institutional framework for water resources management had been the Water Code, Decree No 14.859 established in 1978. The code granted sole ownership and managerial responsibilities of surface and ground water resources to national and municipal government, so they had managed water user fees, concessions, and permits. At the same time, the Code recognized water property rights of registered private owners prior to the enactment of the Code.

The reform campaign run by CNDAV in 2003 proposed amending Articles 47 of the Constitution to incorporate seven key principles (Balanyá, 2005):

- 1) water is a basic human right, not a “need” that can be satisfied by private corporations in exchange for profit, and therefore, social criteria prevail over economic criteria;
- 2) water for human consumption is given priority over all other uses of water;
- 3) corporations cannot pump water and export it without limits, either as bottled or bulk water;
- 4) a majority approval in parliament is required to provide water to other countries facing water shortages, for solidarity reasons;
- 5) private operation of water delivery and sanitation services are illegal, and can only be provided directly by state or government entities;
- 6) the participation of consumers, communities and civil society in all stages of water management is required in order to improve transparency of decision-making against corruption of public utilities;
- 7) all water resources must be managed in a sustainable way, which emphasizes water conservation and the prevention of water contamination.

This proposal was reflected in the outcome text of the constitutional amendments as shown in Table 13 (Constitute project, 2012).

Table 13. Brief statement of the 2004 constitutional amendments

<p>Article 47</p> <p>The protection of the environment is of general interest. Persons must abstain from any act that causes grave depredation, destruction or contamination to the environment. The law shall regulate this provision and may provide sanctions for transgressors.</p> <p>Water is a natural resource essential for life.</p> <p>The <u>access to potable water and the access to sanitation, constitute fundamental human rights.</u></p> <p>1. The national policy concerning water and sanitation shall be based on:</p> <ul style="list-style-type: none">a. the ordering of the territory, conservation and protection of the Environment and the restoration of nature.b. the sustainable management, in solidarity with the future generations, of the hydro resources and the preservation of the hydrological cycle which constitutes [a] matter of public interest. <p><u>The users and the civil society, shall participate</u> in all instances of planning, management and control of hydro resources; establishing the hydrological basins [cuencas] as basic unities.</p> <ul style="list-style-type: none">c. the establishment of priorities for the use of water by regions, basins, or parts of them, having the first priority [be] the provision of potable water to the population.d. the principle that the delivery [prestación] of the services of potable water and sanitation, must have preference for reasons of <u>social order over the economic order.</u>
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Any authorization, concession or permission that in any manner infringes the provisions above[,] will be considered of no effect.

2. The surface waters, as well as the subterranean [waters], with the exception of rain water, composing a hydrological cycle, constitute a unitary resource, subordinate to the general interest, that forms part of the *public state domain*, as public hydraulic domain.

3. The public service of sanitation, and the public service of the provision of water for the human consumer will be *provided exclusively and directly by state juridical persons*.

4. The law, by three-fifths of the votes of the total of the members of each Chamber, can authorize the supply of water, to another country, when such [country] encounters [the] inability to provide it[,] and for reasons of solidarity.

Source: Constitute Project, 2012

4) Policy-oriented learning for new institutional arrangements

4-1) Organizational reforms to strengthen regulating entity, coordination among different levels and jurisdictions of governments, and civic space

Following to the 2004 constitutional reform, organizational reform was conducted as well. To avoid fragmented authorities of water management, the central government created the National Directorate for Water and the Sewage System (DINASA, currently DINAGUA) as a coordination structure under Ministry of Housing, Land Management and Environment (MVOTMA) in 2007. The MVOTMA has responsibility for any subjects related to housing, territorial planning, environment, water, and climate change in the state. Under the MVOTMA, DINASA has played the roles in granting rights of water use, approving hydraulic resources which was previously under the domain of the Ministry of Transport, and formulating national water and

sanitation policies, and contemplating the participation of the various actors (MVOTMA, 2007). They also have proposed application of sanctions, arbitrated conciliation measures between users, registered the rights in the Public Water Registry, and carried the inventory of water resources. Above all, DINASA facilitates coordination of different departments of governments for water related-issues.

In addition to DINASA, the Uruguayan government created a civic space, COASAS (Comisión Asesora de Agua y Saneamiento) under MVOTMA, which is a regional advisory commission on water and sanitation. The objective of COASAS has been to open social control and citizen participation in the planning, management and control of national water and sanitation policies. The members of COASAS have included CSOs, consumer groups, Unidad Reguladora de Servicios de Energía y Agua (URSEA, a regulatory unit), the University of the Republic (UDELAAR), the executive branches from National Congress of Mayors and the management of OSE (Travis, 2011).

The formations of DINASA and COASAS are seen to be an attempt of the government to address a wider array of public goals beyond cost efficiency concerns and to ensure efficiency, coordination and stability in public service delivery by balancing citizen, labor and community interests. Similar efforts have been observed and reported in municipalities in other countries (Bel et al., 2018).

4-2) Environmental Justice: Environmentally sustainable provision required in Constitution

The Uruguayan water reform was one of the first instances where the requirement for environmentally sustainable provision was incorporated in a constitution. As discussed

previously, apart from the considerations on a human right to water, public provision, and participation of CSOs, the CNDAV campaign also called for environmental justice by addressing the need of preserving and protecting aquifer for water as a public good. The frame of “environmental justice” was suggested by a member of CNDAV, REDES-AT (Friends of the Earth-Uruguay), the Uruguayan affiliate of Friends of the Earth-International. They believe the current environmental crisis has been largely the result of the concentration of resources and decision-making in the hands of corporate actors (Friends of the Earth-International, 2010). In their view, the poor had to bear the heaviest burden of environmental degradation and pollution, indicating that the human right and the protection of the environment are inseparable. In the same manner, they also asserted that water privatization without strong regulation would cause corporate and state malfeasance against the natural environment. The REDES-AT has been also actively participating in Sustainable Uruguay Program, food sovereignty and trade and investments issues as well. Their integrated approach to the water privatization issue with environmental, socioeconomic, political, and cultural standpoint successfully created the linkage between social inequity and ecology, called the “social-ecological perspective”(REDES-AT, 2004).

Responding to their concern on environmental justice, the government implemented National Social Emergency Assistance Plan which targeted 10-percent of households living in extreme poverty and attempted to mitigate the potential negative impact of the Increasing Block Tariff that might cause severe burden on the poor households consuming high volume of water (Spronk et al., 2014a). With the assistance of the program, the poor households have paid roughly US \$2-3 per month regardless of their water consumption while average household pays US \$20 dollars for water per month. Another effort of the government in achieving environmental justice was to require a sustainable plan and implement the control and compliance for responsible use

and management through amended Irrigation Law and the National Water Plan launched in 2016 (Bortagaray et al., 2017).

4-3) Transitory provision for compensation

In addition to a human right to water, public provision, social inclusion, and environmental sustainability, “transitory and special provision” was another unique addition to the Uruguayan constitutional reform. The amendment stated if the concessions were cancelled, the private concessionaires would receive only reimbursement on unamortized investments, opposed to compensation for lost future earnings (Constitute project, 2012). After the Cochabamba’s water conflict where Bechtel filed a US \$50 million claim against the Bolivian government in the World Bank’s ICSID to recover sunk investments as well as lost future profits, the Uruguayan government learned the lesson and attempted to avoid potential lawsuits from private concessionaires by adding the provision. This is clear evidence that policy-learning occurs not only within the Uruguayans’ water policy subsystem, but also from out of the subsystem.

4-4) Raising capital investment by the OSE based on high creditworthiness

Even though the amended constitutions still leave a possibility for municipal authorities to create an opportunity for private sector participation under public provision, Rafael assures that the current political landscape and social sensitivities make any attempt of private sector participation hopeless and therefore Public-Private Partnerships (PPPs) is politically inviable in Uruguay water management (Rafael, Mar 28, 2019). To raise financing from the domestic capital market, the OSE estimated that they needed \$100 million annually in investments to achieve universal access by 2020 and launched a 22 year-bond program in 2017 (World Bank, 2019).

Thanks to the OSE's favorable credit rating, the bonds were fully subscribed mainly by local pension funds. The World Bank, who has economic belief on water and encourage the PPPs model for water sector reform, acknowledges that the reforms in water sector in Uruguay has been successful (World Bank, 2014; 2019).

4-4) Alternatives to Public-Private Partnerships: Public-Public Partnerships to build international solidarity

The OSE is currently a leader in initiating Public-Public partnerships (PuPs) in the region. The PuPs between OSE and FFOSE from Uruguay and many cities in Peru, Bolivia, Columbia, Paraguay and Ecuador have been in progress. Madeline Baer points out that while there is little public information about the details of these partnerships or their outcomes yet, PuPs are an integral part of a larger OSE strategy of building international solidarity among public water utilities (Baer, 2017). He notes that the OSE became a member of GWOPA (Global Water Operators' Partnership Alliance), the Platform for Public Community Partnerships of the Americas, and ALOAS (Latin American Association of Water and Sanitation Operators) and have been offering expertise through partnerships that offer a low-cost way to transfer technological solutions to struggling water operators. To do this job, the OSE created an office for developing PuPs called the Office of Cooperation and Solidarity, National and International (Baer, 2017). This attempt can be seen that stakeholders expand their previous subsystem to global level to expand their leverage and resources.

5) Challenges to current water policy under public management

5-1) Impact of the civic space

The COASAS has been the space for citizen participation in water policy making. It has had meetings approximately five times a year and the CNDAV has actively participated in the institutionalized space in COASAS (Travis, 2011). However, Rafael questioned the efficacy of the COASAS. He said the COASAS has been played as “a high-level consulting body integrated by a large number of institutions representing different actors. But in practice, it plays a very minor role and is only a symbolic body” (Rafael, Mar 28, 2019). He explained that “the referendum and associated legislation opened up the possibility of the participation of civil society, but decisions are not binding” (Rafael, Mar 28, 2019). This indicates that COASAS initiated an instrumental mechanism of citizen’s participation, but direct public participation in decision-making, as opposed to the procedures of representative democracy, is relatively new and the impact of the COASAS on policy making and implementation is unclear at this point.

5-2) Relatively new regulation entity for increasing challenges

Rafael comments that the most difficult challenge of Uruguayan water management system is to improve and maintain water quality at the water source as pollution and eutrophication have occurred (Rafael, Mar 28, 2019). The challenges are connected to land use, and therefore to regulate and monitor land use is another challenge. He thinks that URSEA (Unidad Reguladora de Servicios de Energia y Agua), a regulatory entity created in 2002 to complement the policy of private sector participation, possesses the good level of enforcement as it enforces only a few sectors: water, fuel and energy that are mostly under public provision now (Rafael, Mar 28, 2019). On the other hand, he argues that DINAGUA, a relatively new regulatory entity created in 2005

to govern national-level water body is slowly becoming stronger, but it has more challenges to regulate the loss of water and biodiversity, degradation of the soil and habitats, and the deterioration of ecosystems arising from forestry and mining industries (Rafael, Mar 28, 2019).

6) Conclusions

First, similar to the Cochabamba case, the dynamic change of water policy in Uruguay from privatization to re-municipalization of OSE confirms that the water policies have been the results of powerful coalitions of policy stakeholders. A grassroot civil society consortium, CNDAV, with strong support from international CSO's, successfully campaigned for the water referendum and its outcome has resulted in the constitution amendments that declared four important provisions in water policy: 1) a human right to water; 2) public provision; 3) the participation of consumers, communities and civil society in all stages of water management; 4) an emphasis on water conservation and environmental justice. The amended constitution has been implemented through the elaboration of the law and its regulation shared with the national government, which guarantees the necessary participation of the social entities and local communities through institutionalized structures.

Second, the inclusion of environmental and social/human rights in Article 47 of the new constitution reflects the conjoint emphasis on environmental justice placed by the CSOs with ecological belief that formed the nucleus of the CNDAV. This indicates that two different policy core beliefs, economic and social beliefs in this study, can combine and make a synergistic impact on their leverage. The inclusion of transitory and special provision reflected the leadership's integration into activist transnational networks fighting not only water privatization, but also

neoliberal trade and investment regimes. The case of Uruguay water policy shows that the decision of re-municipalization in water sector influences approaches to other policy subsystems.

Third, the OSE, based on successful reform, raised sufficient capital investment fund by launching a bond and the bond was consumed mostly by domestic companies. Uruguayan's re-municipalization experience in water sector has spurred similar efforts in Latin America. The OSE is a leader in initiating PuPs in Latin Americas and PuPs are integral parts of a larger OSE strategy of building international solidarity among public water utilities. This is an example that international civil society and other public stakeholders who are previously outside of domestic policy subsystem starts to get involved in domestic policy subsystem. Stakeholders attempt to maximize their resource and leverage by reaching out stakeholders outside of their domestic policy subsystem. In sum, the Uruguayan case has an instrumental value for challenging discourse of private sector participation, especially pursued by international donors.

3.3 JOHANNESBURG, SOUTH AFRICA: A CITY WITH HISTORICAL INEQUALITY AND LIMITED WATER SUPPLY AND FINANCIAL CAPABILITY

Johannesburg created a corporation unit, Johannesburg Water, and granted it to private concessionaire, seeking increased efficiency and the transformation of a nonpayment culture left over from the Apartheid era. The government has implemented the Free Basic Water policy, the Increasing Block Tariff, and the Prepaid Meter to address historical inequality in water service under limited financial capacity. The researcher of this study officially requested an interview to the Department of Water and Sanitation in Johannesburg and Cape Town. The staff in Johannesburg did not reply. The staff in Cape Town asked me to get a permission from the department authority and the department approved the interview after reviewing my official application. The staff in Cape Town asked administrative staff who would be able to answer to my interview questions with better knowledges but failed to get them. My impression is that the interview questions are difficult for administrative staff to answer. Instead of answering to personal interview, they provided organizational reports for some interview questions, which are cited throughout this chapter.



Figure 9. Johannesburg in South Africa

Source Google Map

Johannesburg is the biggest city in South Africa with a population of four million as of 2015; it is located in the center of the country (Statistics South Africa, 2019). South Africa has experienced the effects of the forced inequalities and wide-spread poverty that the apartheid system introduced. Inequalities have been particularly evident in the quality of water services provided to different areas, which are for the most part still defined by race (Kotzé et al., 2011). With the end of apartheid and the beginning of democracy in 1994, the new government prioritized the redress of inequalities and sought to better the lives of the poor by providing them with improved public services including water supply (Hoogeveen et al., 2006). At that time, approximately 37

percent of South Africa's population, 80 percent of whom lived in rural areas, lacked access to basic water supplies (Hoogeveen et al., 2006).

External event: 1996 Constitution under post-apartheid government

Unlike the Cochabamba or Uruguay cases, where international donors initiated the conversation of water privatization, the change in water management policy in Johannesburg was initiated at the national level by an external event, specifically the amendment of the South African Constitution under the post-apartheid government. The Constitution of South Africa, amended in 1996, recognized past injustices caused during the apartheid era and the need to establish a society based on democratic values, social justice and fundamental human rights, including the right to water. Table 14 is the brief statement of the part of constitution related to water management (South Africa Government, 1997a).

Table 14. Brief statement of 1996 Constitution related to water management

<p>Article 24: Everyone has a right to an environment that is not harmful to their health or well-being</p> <p>Article 27, 1: Everyone has the right to have access to...<i>sufficient</i> food and <i>water</i> and ...Social security, including...appropriate social assistance.</p> <p>Article 27, 2: <i>The state must take reasonable legislative and other measures</i>, within its available resources, to achieve the <i>progressive realization</i> of these rights.</p>

Source: South Africa government website, 1997

The right to have access to sufficient water in South Africa's Constitution was implemented to address inequality and wide-spread poverty the apartheid system had introduced. The Constitution assigned duties to both central and local governments to protect and fulfill the right with reasonable laws and measures. The recognition of the right was translated into new laws, so that the right obligations could be enforceable by the courts.

In line with these constitutional mandates, relevant departments of the state, namely the Department of Water Affairs and Forestry, the Department of Provincial and Local Government and other provincial local government departments, have developed legislative and other measures towards the progressive realization of the right to have access to sufficient water (South Africa Human Rights Commission, 2000), resulting in the establishment of two acts dealing with water governance in South Africa: the 1998 National Water Act (NWA) and the 1997 Water Services Act (WSA). The fundamental principles of the NWA seem very progressive because the NWA abolishes the concept of riparian rights which allocates water rights only to land-owners and consequently excludes the vast majority of people. The NWA also appoints the government as the public trustee of the nation's water resources so as to ensure the sustainable and equitable use, management and conservation of water resources (South African Government, 1998). Additionally, the NWA codifies the constitutional right of access to basic water and sanitation and prioritizes socio-economic needs including the right of access to sufficient water (South Africa Government, 1997b). Under the NWA, the right of access to sufficient water does not mean that the state provides water freely, but that it has an obligation to create "reasonable" mechanisms that enable people to have access to "sufficient" water. The definitions of the two terms, "reasonable" and "sufficient" are not clear under the NWA and have caused conflicts among different groups

of people who argued over these two terms. These conflicts are explained in later sections of this chapter.

In addition to the National Water Act, the 1997 Water Service Act (WSA) has shifted emphasis from supply management to demand management as an approach to water management and seeks to conserve the nation's water resources by lessening demand through pricing mechanisms and other methods to reduce non-revenue water (South Africa Human Rights Commission, 2000). To do so, the WSA has implemented typical provisions of neo-liberal approaches, which undermine the overall aims of the legislation, such as of decentralization in setting up the duties of the central and municipal governments and water boards, cost recovery under the Norms and Standard for Tariff section, and privatization under the Contracts and Joint Ventures with Water Services Providers section (South Africa Government, 1997b). Note that these neo-liberal provisions were implemented under limited profit and surplus making. The WSA has addressed that the water services should be provided on an efficient, equitable, cost-effective and sustainable basis without profit and surplus. Table 15 is the brief statement of the legislation with respect to neo-liberal provisions under the WSA (South Africa Government, 1997b).

Table 15. Brief statement of neoliberal provisions under the Water Service Act

Acknowledging: that although municipalities have authority to administer water supply services and sanitation services, *all spheres of Government have a duty*, within the limits of physical and financial feasibility, to work towards this objective.

Article 10, 1: *...place limitations on surplus or profit...* the *recovery of costs* reasonably associated with providing the water services.

Article 19: a water services authority may only enter into *a contract with a private sector* after it has considered all known public sector water services providers which are willing and able to perform the relevant functions... a joint venture with another water services institution other than a public sector water services institution which will provide services within the joint venture *at cost and without profit*.

Source: South Africa government website, 1997

Since the state started to implement the neo-liberal provisions, several groups that possess different beliefs on water and perspectives on the provisions started to rise in the water management policy subsystem in Johannesburg.

1) Policy stakeholders and their policy core beliefs

Table 16 shows the list of organizations and their core belief on water identified by the content analysis of this study.

Table 16. Classification of organizations and their core beliefs on water in Johannesburg

case

View on water	Local CSOs	International CSOs	Public actors	Private actors
Economic good	Business Leadership South Africa Roundabout Water Solution ANC	World Bank, IMF	Municipal Infrastructure Investment	Suez Vivendi JOWAM
Social good	SA Coalition Against Water Privatization (CAWP) Anti-Privatization Forum (APF) Anti-Eviction Campaign SA Municipal Workers' Union (SAMWU) Congress of SA Trade Unions (COSATU) Social and Environmental Movements	African Ministers Council on Water Ghana National Coalition Against the Privatization of Water Concerned Citizens Forum in Durban Public Service International Alternative Information and Development Centre Public Citizen 50 Years is enough Polaris Institute Council of Canadians	High Court Supreme Court Constitutional Court	
Ecological good	SA Water Caucus Environmental Monitoring Group Operation Hydrate Mvula Trust	World Wide Fund Wildlife and Environment Society of South Africa Earth life Africa Global Water Partnership	Catchment Management Agencies	
Sector	Water Institute of Southern Africa Water Research Commission	World Health Organization EU	City government Department of Water Affairs Water Research Commission Department of Cooperative Governance, Traditional Affairs	Rand Water Johannesburg Water Development Bank of Southern Africa

Purple represents 'self-contradiction' group described in Page 93.

Pink represents 'corporation' group described in Page 93.

Source: own analysis

Similar to the Cochabamba and Uruguay cases, the content analysis revealed that a number of organizations participated directly and indirectly in policy subsystem for the Johannesburg case. The prominent group is civil society organizations at local and international levels which have the ecological belief. They have been working for water conservation and demand control and have actively participated in development plans led by the government. Another prominent group is the courts. Since the government implements contradicting policies, Free Basic Water and Prepaid Meter, which are based on the social and economic beliefs, respectively, courts at different levels appeared significantly in media report to respond to citizens' claims. The meanings of 'self-contradiction' and 'corporation' groups (marked in purple and pink, respectively) are explained in Section 3) Coalition of key stakeholders.

2) Water policy subsystem of Johannesburg

Among many stakeholders, the content analysis of Johannesburg case reveals that public governmental actors, such as the city of Johannesburg and the judicial courts, earn high betweenness centrality as shown in Table 17. It indicates that the governmental actors participated most actively in decision-making and its implementation dialogue.

Table 17. Betweenness centrality of stakeholders in Johannesburg water policy subsystem

Key Stakeholder	Betweenness centrality
CityGov	65.6666667
Catchment Agency	15.0000000
Joburgh Water	7.1666667
Cosatu	5.5000000
Constitutional Court	5.0000000
High court	5.0000000
Supreme Court	5.0000000

AntiPF	2.5000000
Coalition Against WP	2.5000000
RandWater	2.5000000
ANC	2.3333333

Source: own analysis, using R software

Figure 10 features the key organizations which have directly/indirectly participated in the water management policy subsystem in Johannesburg case.

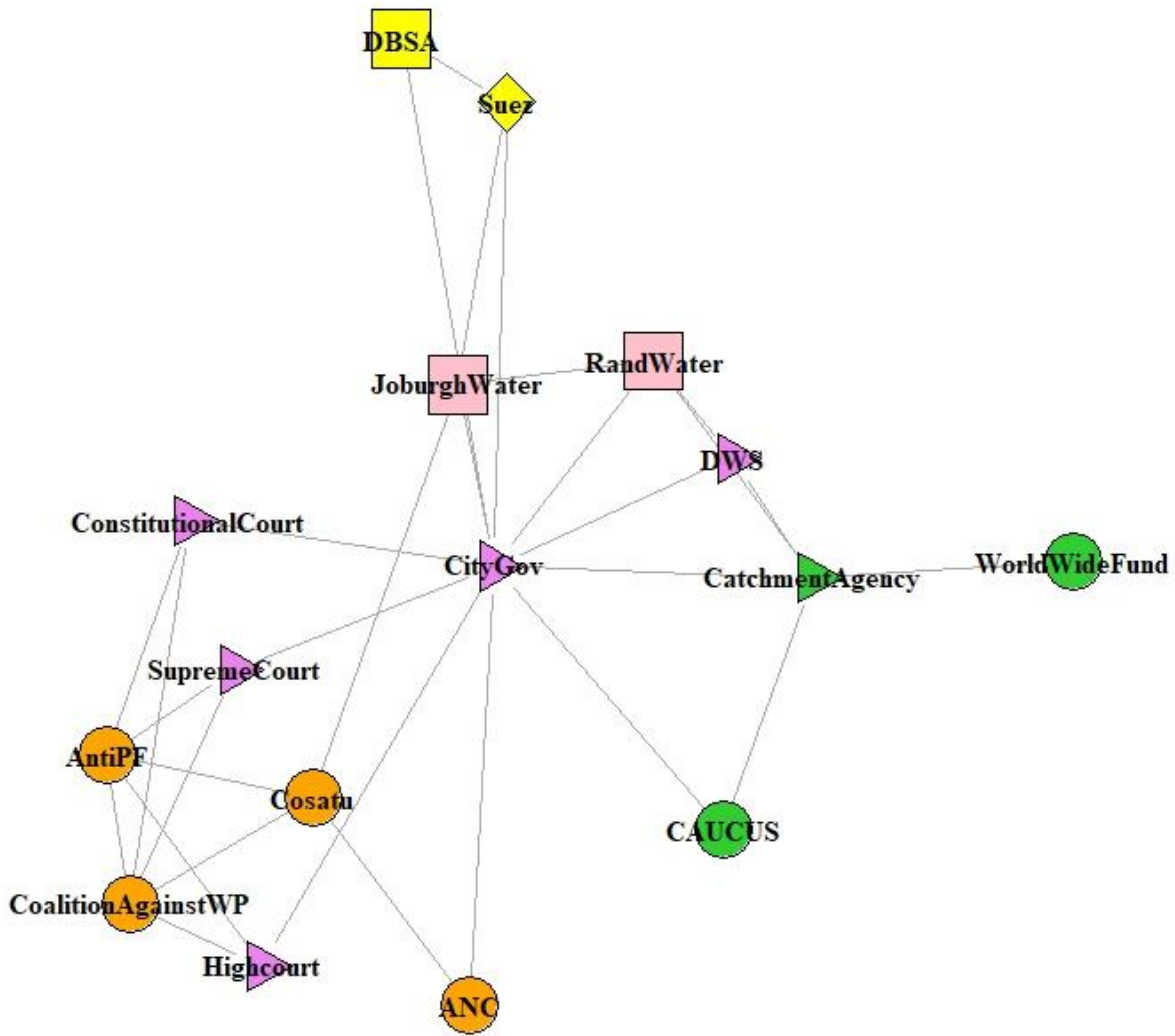


Figure 10. Key stakeholders and their network with other stakeholders within Johannesburg water policy subsystem

Policy core beliefs: Brown represents the social belief; Blue represents administration belief; Yellow represents economic belief; Green represents ecological belief following Table 2; Governmental units and juridical courts in purple (violet); Corporation units in pink / nonprofit in circle; public in triangle; private in diamond; state-owned in square / Ties among stakeholders mean relationship as explained in Page 16

Source: own analysis, using R software

Figure 10 reveals that interactions among key stakeholders in Johannesburg's water policy subsystem is interesting in that the government seems to interact harmoniously with multiple groups with different beliefs. Under the amended constitution, the governmental actors (marked in purple) acknowledge the responsibility of the state as a water provider and apply neoliberal approaches under the objective of cost recovery. They also create corporation entities such as the Rand Water and the Johannesburg Water (marked in pink) which are owned by the government but operated under private business law. The institutional arrangements to support a human right to water and cost-recovery will be explained through this chapter. Figure 11 shows the variables captured under the Advocacy Coalition Framework for the Johannesburg case.

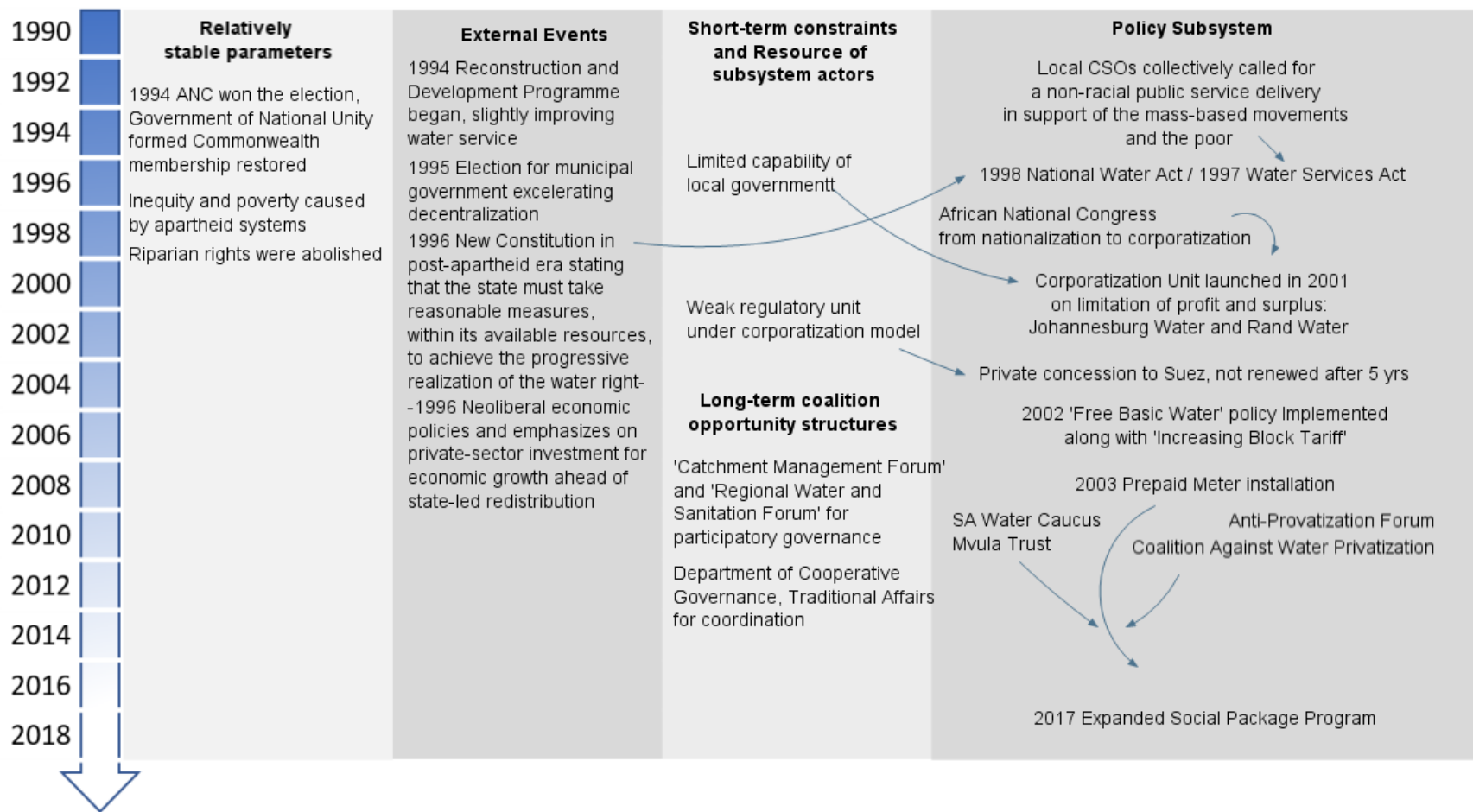


Figure 11. Variables captured under the Advocacy Coalition Framework for Johannesburg case

Arrows indicate causal relationship between variables

Source: own analysis, using AnyLogic software

3) Coalition of key stakeholders

3-1) Introduction of ‘self-contradiction’ and ‘corporation’ groups

Self-contradiction group - the state and city government under National Water Act as well as the influence of neoliberalism: Under the National Water Act that requires governments at all levels to do reasonable actions to provide sufficient water to citizens, the state government and the city government have implemented two provisions that seem to contradict each other: the Free Basic Water policy, originating from the social belief, and the Prepaid Water Meter, originating from the economic belief. The two contradicting, but co-existent, policies in the water management subsystem of the Johannesburg case prove that the policy core beliefs that are held by different coalitions can be implemented compatibly under the goal of achieving a human right to water and cost-recovery, marking the governmental actors in purple color in Figure 10.

Corporation group – “not for profit” state-owned corporations under private business law: Another group arising from the Johannesburg water management policy subsystem is the group of corporations such as the Johannesburg Water and Rand Water that are owned by the government and operated under private business law. The background of creating these corporations involves strong demands for local government reform and expanded services in the post-apartheid era. During 1995-2000, the drive of private sector participation was very strong in South Africa under the climate of local government transformation and municipal amalgamation of defunct black local authorities into white local authority administrations (Smith, 2006). The private sector participation was introduced by two national-level lending institutions, the Development Bank of South Africa and the Municipal Infrastructure Investment Unit, and was supported by a leading political party, African National Congress (ANC). They introduced the

private sector participation as a solution to the financial crisis of local authorities who were trying to rapidly expand services to previously excluded areas. As a result, Cape Town, Durban and Johannesburg, the three largest metropolitan areas in the state, started corporatization of their water service entities.

In doing so, the city of Johannesburg created Johannesburg Water, a fully corporatized entity operating under private business law in 2001, and awarded the management of Johannesburg Water to JOWAM, a consortium led by the Suez, with the five-year mandate of improving financial and operational performances. (Beck et al., 2016). During the concession, the city remained the owner of Johannesburg Water, while delegating its shareholder responsibilities to an appointed board of directors. The Contract Management Unit in the city government was created to oversee the service delivery standards of Johannesburg Water. In addition to the objective of gaining efficiency, another purpose of introducing the corporatization model as a new institutional model of water service was to transform the non-payment culture to publicly owned utilities that became prevalent during the Apartheid era. Laila Smith, a director of Research and Evaluation at Contract Management Unit reported that “massive state bureaucracy implementing inequitable approach to service delivery was highly inefficient and difficult to maintain due to growing civic unrest, prompting a decline in revenues from state-owned enterprises.” (Smith, 2006). The contract ended after 5 years and was not renewed, indicating that the private concession of the Johannesburg Water was implemented for short-term as a turning point to increase efficiency gain and reform non-payment culture in Apartheid era.

In addition to Johannesburg Water, several private regional water boards, such as Rand Water, were created. They are owned by the government but operate dams and manage bulk water supply and wastewater infrastructure under the private business law. The special feature of these

corporations is that they are expressly “not for profit” organizations, with their profit being reinvested in the company’s infrastructure and development projects. This feature is clearly in contrast to other private companies which work to profit shareholders, marking the Rand Water and the Johannesburg Water in distinct pink color in Figure 10.

3-2) Coalition of organizations with the ecological belief

The content analysis reveals that there are good numbers of CSOs participating in the discourse of water policy in Johannesburg. Especially, CSOs with ecological belief have claimed themselves as “dripping tap watchers” (e.g., South Africa Water Caucus, Mvula Trust) and have been seeking environmental justice and ecological sustainability, attempting to provide an alternative to water use by encouraging water conservation and efficient water management. The Mvula Trust, for example, was established before 1994 through cooperation between the government of South Africa, the democratic movement, and the European Union (EU), to promote the delivery of water and sanitation services on the principle of community-led development (Beck et al., 2016). It also contributed to forming water committees in historically marginalized communities and a wide range of donors including EU were attracted by the rapid roll-out, as well as the commitment to community-led development (Beck et al., 2016).

3-3) Coalition of organizations with the social belief

In addition to CSOs with ecological belief, social movement CSOs with social belief at grassroot and international levels were observed. At the grassroot level, Anti-privatization Forum and Coalition Against Water Privatization, which were formed by Johannesburg-based political activists, students, unionists and community organizations, have become active in response to the

impact of the government's neo-liberal inspired privatization policy (McKinley, 2005). In their view, privatization implies the anticipation of commercial orientation of the city of Johannesburg in transferring its responsibility of delivering basic services to citizens. Moreover, they consistently criticized the government's water policy as "neoliberal", and its approach to tariffs as "commodification" and "preparation for privatization" (McKinley, 2005). They also have challenged the policy of the city of Johannesburg in setting the level of free basic water at 6 kl per household per month. They argued that an allocation based on the number of people in a household would be administratively complex and open to abuse as lower income household tend to have more family members. In their progressive point of view, an optimal strategy would provide a larger free lifeline tariff, ideally on a per capita basis, not a per household basis, and then rise in a concave manner to penalize luxury consumption (Public Citizen, 2018). Their proposals seek for greater central subsidies for supplies to both the rich and the poor. Their calling for affordable and subsidized water service seem to result in the new setting of the Free Basic Water policy under a limited capacity which provides increasing amount of free basic water for those who are most in need by eliminating the benefit from those who are not in need.

The increasing leverages of CSOs with ecological and social beliefs have been translated into the creation of important spaces for civic engagement in water management, such as 'Catchment Management Forum' and 'Regional Water and Sanitation Forum'(Beck et al., 2016). These fora are hosted by the Catchment Management Agencies and Regional Water Boards, respectively, in cooperation with the Department of Cooperative Governance, Traditional Affairs (Beck et al., 2016). The CSOs have participated in the fora and influenced on water management policy by giving input to the government strategies as well as by ensuring proper representation of stakeholders in board members.

4) Policy-oriented learning for new institutional arrangements

4-1) Institutional arrangements to support the 1996 Constitution: Free Basic Water policy

The central government implemented the Free Basic Water policy after a wide spread cholera outbreak in KwaZulu-Natal in 2000 which was reported to be caused by water cut off under public provision for cost-recovery purposes (Counter Punch, 2018). The Free Basic Water policy requires that every municipality must provide a minimum of 25 liters of water per person per day, or 6 kilo-liters per household of eight per month, which follows the “minimum amount” the World Health Organization suggests for basic food and hygiene needs, for free within 200 meters of the home (South African Government, 2002). Note that a human right to water recognized in United Nations General Assembly Resolution 64/292 established on July, 28, 2010, states that a person needs between 50 and 100 liters of water per day to ensure to meet not only the basic needs but also health concerns including laundry and bathing. It also states the water source should be 1) safe, meaning that it meets the WHO guidelines for water quality, 2) acceptable, meaning that water service should be culturally appropriate and sensitive to gender, lifecycle, and privacy, 3) affordable, meaning that water costs should not exceed 3 percent of household income, and 4) physically accessible, meaning that the water source has to be within 1,000 meters of the home and collection time should not exceed 30 minutes. The 6 kiloliter of water per household per month (approximately 1600 gallons) provided by the government in Johannesburg is far less than the standard of sufficient water for basic needs and health concerns stated in the UN resolution 64/292, indicating that the government takes a limited view of the right under limited financial capability.

4-2) Institutional arrangements to address limited financial capacity: Increasing Block Tariff

To implement the Free Basic Water policy, the city government started to deal with the backlogs of providing basic water and cost recovery strategies. Initially, the Free Basic Water policy was designed to provide basic water needs to all people regardless of their financial status. The goals of providing free lifeline water was to improve public health, gender equity, environmental protection, economic spin-offs, and the possibility of desegregating residential areas by class (Bond, 2005). However, in the case of Johannesburg, the benefit of the Free Basic Water policy is unclear at this point especially because the amount of free water is not enough to satisfy basic needs, thus maintaining inequality. When the Free Basic Water policy was launched, the government also introduced the idea of “progressive water pricing” where the free allocation of water was the first price block and the consumption after 6kl per month was charged on an Increasing Block Tariff basis (McKinley, 2005). While the higher-end pricing blocks intended to subsidize free water available for poorer households, it could also act as a demand control tool that provides disincentive to over-consumption (McKinley, 2005).

The problem of implementing the combination of Free Basic Water policy and an Increasing Block Tariff is that after consuming the free basic water, the next consumption block could be unaffordable, leading to even higher rates of water disconnections in poor areas. Indeed, many low-income households have more members, often consumed higher volumes of water, and received higher water bill with extra charges on luxury consumption (Ourwatercommons, 2019). This is why some activist see the Free Basic Water policy as the part of a larger package of water commodification, 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 (Ourwatercommons, 2019).

In addition to this drawback, an Increasing Block Tariff may introduce a disincentive for businesses to supply low-volume users. Responding to the criticism that the government wasted resource on non-poor population, the city government announced that only indigent households registered on the Expanded Social Package Program would receive a free basic water allocation of increasing amount of water, 10-15 kiloliter per month depending on their poverty level, effectively starting in 2017 (Esposito, 2018). This change brought another debate over whether the application process for the program would be burdensome and exclude many poor and vulnerable people (BusinessDay, 2018). Access to water in South Africa has been enhanced by constitutional rights, but the implementation of the Constitution has proven challenging, and the amount of free basic water also reflects the capability of municipality. Above all, the sustainability of the municipality in finance and management is as important as the right of the individual.

4-3) Institutional arrangements to achieve cost recovery: Prepaid water meter

In addition to the Free Basic Water policy and the Increasing Block Tariff, prepaid water meters have begun to be installed as a mean to address operational efficiency including metering and billing, network rehabilitation, water leaks, water usage habits as well as full cost-recovery by the Johannesburg Water during the concession with Suez (Legodi, 2008). Not surprisingly, the prepaid water meter installation caused a great level of international and national debate over, and resistance against, the meter. Before the concession, one-third of Johannesburg Water's purchases from Rand Water were pumped into some underprivileged communities like Phiri, Soweto, 70-percent of which was unbilled or granted at a flat rate of 110 rand (US\$15) per month (Africa

News, 2006; Smart Energy, 2007). In 2003, the Johannesburg Water chose Phiri as a pilot of project known as Operation Conserve Water, introduced prepaid water meters, and discontinued the unlimited water supply (Legodi, 2008). The prepaid meters have been installed in middle- and high-income areas as well to increase accessibility to water for general citizens.

Despite resistance against the meter, the city reported that water supplied in this area had dropped by 80-percent, five years after the prepaid meter started being installed in 2002 and it translated into a R95 million (US\$13.4 million) of total saving as of 2007 (Smart Energy, 2007). Another measure of prepaid meter reported from Soweto Township in Johannesburg that household water consumption dropped from 66 kiloliter to 12 kiloliter per month and water saved from prepaid meter project during 2013-2014 period is 25 million kiloliters which is equivalent to the value of R880 million dollars (57 million USD) (TimesLive, 2015).

The satisfaction or dissatisfaction of a prepaid meter perceived by customers has largely depended on technical aspects of the meters according to the literature (Heymans et al., 2014). Prepaid meter is different from vending machine in many aspects, as the Free Basic Water and the Increasing Block Tariff are still applied in prepaid meter setting and the meters can be installed in either household or community. Each household has their own physical card to get water from a prepaid meter and their consumption is recorded. Under this setting, there have been technical errors reported: the physical cards could be lost, damaged, or stolen, and it could be difficult to buy and replace. A numerical credit key and keypad could be alternatives to the physical cards, but they have not been implemented at scale yet. Recharging the physical card is another burden, as people have to plan their purchases and consumption to ensure they have enough water to get through evenings and weekends. Recharging stations and vendors may not be available during weekends and traveling cost and managing the travel time to the stations also matters. Currently,

credit for prepaid electricity meters can be purchased on mobile phone, but not for prepaid water meter yet. The meters are under the risk of vandalism, bypassing, and tampering, all of which raise the cost of services. These technical problems of prepaid meters have been slowly addressed during the past decade.

The outcomes of the prepaid water system are controversial: those who are opposed to prepaid meters say they compromise people's right to water because water is cut off when people cannot afford advance payment without scope for appeal or negotiation. In their view, prepaid meter meters symbolize the "commodification" of water, and they associate these meters with the exclusion from services of those who cannot pay. They also argue that the large investment required to run a prepayment system could be better spent elsewhere to expand and upgrade services. On the other hand, supporters of prepaid meter systems say that the system helps people to better budget their water spending and helps the state to better manage its revenue flows to invest in extending water services to under-serviced areas. In their view, water cut-offs are deemed constitutionally sound because the non-payment of service bills negatively affects the rights of others to water. In 2014, the World Bank reported that the customers using prepaid meter got much more aware of what they would pay and what they get for what they pay (Heymans et al., 2014). They conducted focus group and interviews to analyze the outcome of prepaid meters and concluded that most customers have gotten aware of the impact of the Increasing Block Tariff within a monthly cycle, resulting in lower consumption of water in general. The report also mentioned that the cost effectiveness of prepaid meter systems would depend on the amount of the investment specific to the application (e.g., household, community, commercial use, and industry) and its opportunity costs for other uses, such as billing system upgrade or education program for

demand control (Heymans et al., 2014). The prepaid meter has still spread with mixed outcomes in the dimensions of service affordability, financial sustainability, and socio-economic inclusion.

4-4) Policy learning by a leading political party, African National Congress (ANC)

It is complicated to categorize a political party, African National Congress (ANC) and to analyze their core belief on basic service provision and political discourse with respect to the neoliberal paradigm because their belief seems to have shifted throughout the years. Nelson Mandela, the president of the ANC, was elected in 1994 to head South Africa's first multiethnic government. Before the 1990s, the ANC supported an economic model which held redistribution and nationalization as a central theme (Nattrass, 1994). However, between the 1990 and the 1994 elections, the ANC's policies on redistribution slowly softened. In 1992, the ANC's policy conference effectively removed nationalization as a policy option and radically changed their stance on foreign investment from cautious to supportive (Nattrass, 1994). Later, the ANC faced the first elections for new local government structures scheduled for December 2000 and had to fight a campaign to win the vote of the poor. They promised local job creation, free basic water and electricity to poor areas, and gender advancement at the launch of the ANC's manifesto for local government elections (IPS, 2000). The Free Basic Water policy was finally given legal status through the promulgation of tariff regulations in June 2001 and became the national law as described previously. After the election, the ANC has supported the idea of the corporatization model of water service. It is hard to believe that the constitutional right to water would be delivered by private business lines and it is questionable whether the private concession was necessary to achieve efficiency gains and stop non-payment culture. South Africa was unique in selecting the corporatization model for efficiency gains within a national framework that was committed to the

universal provision of essential services in limited quantities. In this way, the elected members from the ANC and officials in the city of Johannesburg attempted to grapple with the delicate balancing act of seeking greater efficiency by allowing private concession, while paying attention to its social obligations, particularly to historically marginalized parts of the city. The turnaround of the ANC from driving nationalization agenda to corporatization model with providing free basic water in the post-Apartheid era challenges the distinction of economic and social beliefs in this study as well as the basic assumption of the Advocacy Coalition Framework that policy core belief is hardly mutable.

5) Challenges to current water policy under public management

The implementations of free basic water and prepaid meter policies brought some arguments in the judicial system because not only are these two approaches contradictory and originated in different policy core beliefs, but also because there are debates on the interpretation of the Constitution that requires governments to take “reasonable” actions to provide “sufficient” water. As a result of these debates, courts at state, national, constitutional levels appeared significantly in media report as residents in Phiri claimed that the prepayment meters violated their constitutional right of access to water and the city's free basic water supply was quantitatively insufficient. The case commenced in the High Court, was appealed to the Supreme Court of Appeal, and ended up in the Constitutional Court in 2009 (Mail & Guardian, 2009). The High Court declared that the prepayment meter was unconstitutional and unlawful and ordered the City to provide with a free water of 50 liter per day. However, the Constitutional Court dismissed the applicants' appeal and said the city's free water policies and laws were reasonable and that the installation of the prepayment water meters was neither unfair nor discriminatory (Mail &

Guardian, 2009). It also said that the Constitution has guaranteed only the "progressive realization" of a right to water due to limited finance.

The outcomes of the corporatization model in water management are also debatable. Through the short-term contract with Suez, the city government attempted to achieve institutional rearrangement of water governance, the outcome of which was half successful. Laila Smith, in her paper, explained that the Johannesburg's concession with the Suez under corporatization model involved a three-phased approach: 1) ring-fencing, meaning that all of the costs incurred in providing a service are identified and centralized for the sake of greater transparency; 2) insulation from political interference, which involves transforming the sector into a business unit and nourishing a corporate culture for running a specific sector autonomously; and 3) institutional removal from the state in order to separate the politics of policy development from operations (Smith, 2006). In the literature, these processes of corporatization are often considered as the first step in the privatization process because it involved the commercializing process of a state-owned entity to make it "economically viable" (McDonald et al., 2005b). However, the corporatization process of Johannesburg water entity was somewhat different in that it was not the pre-step of privatization. Rather it was chosen to change a nonpayment culture that existed during the Apartheid era as well as to avoid political debates and resistance that would often accompany the privatization of water entity. By applying cost-recovery approaches such as Increasing Block Tariff and a prepaid meter system, the corporatized entity was perceived to achieve increased efficiency by some local authorities (Smith, 2006). Smith also explains that the impact of such institutional rearrangement, however, was limited because of three reasons: 1) the autonomy of the Johannesburg Water was limited in that the city government was still in charge of revenue function such as billing, credit control, and meter reading for the majority of the city's residents in the

beginning of the concession. Later, the city has transferred the revenue functions over to the Johannesburg Water; 2) the limited autonomy, authority, and capacity of the Contract Management Unit as a quasi-regulator remaining within the city opposed to an independent entity, was constrained in passing judgement on the behavior of the Johannesburg Water, making it hard to develop enforcement mechanisms for the contractor under numerous political and bureaucratic sensitivities such as an electoral cycle; 3) the limited impact was attributed to the distance between the city, who focused on equity objectives driven by political purposes, and the board of directors, who prioritized efficiency objectives with the intent of making Johannesburg Water more commercially viable. The concession of Johannesburg Water reveals that the tensions embedded between the city and the board of directors was inevitable even in the corporatization model where the city government appointed the board members (Smith, 2006).

6) Conclusions

First, South Africa has adopted a human right to water in their constitutions and provided minimum free water as a mean of guaranteeing the right. At the same time, the ANC shifted their economic policy from nationalization to neoliberal economic policy, allowing the privatization of a water entity which employed some neoliberal approaches to water management including prepaid meters and Increasing Block Tariff under the objective of cost recovery. The Johannesburg case is unique in selecting the private management model within a national framework that is committed to the universal provision of essential services in limited quantities of 25 liter per person per day for basic food and hygiene needs. These approaches do not appear to comport with the common concept of a human right to water which demands a supply of water between 50 to 100 liters per person per day for basic needs and health concerns regardless of ability

to pay. The prepaid installation and Increasing Block Tariff approaches show that it is possible to achieve at least partial cost recovery and conserve water consumption. On whole, the city of Johannesburg has attempted to achieve a progressive realization of its right to water under limited financial capability. The case of Johannesburg indicates that achieving a human right to water is in tension with financially viable water services, but the two are not mutually exclusive. It also implies that economic and social beliefs can be adopted compatibly in one water management policy subsystem.

Second, the creation of a corporatized unit, Johannesburg Water, was seen as a commodified and de-politicized processes of water entity and was an attempt to improve efficiency of management and change the nonpayment culture that resulted from Apartheid era. The outcomes of the corporatization model were limited under limited autonomy of Johannesburg Water, limited authority and capacity of the regulatory entity, the Contract Management Unit, and the inevitable tension between the city and the board of directors under two different objectives, social equity and financial efficiency, respectively. The contract was granted only for five years and was not renewed. The remaining questions are whether a corporatized entity under the private business law can uphold the city's objective of social equity and whether the quest for increased efficiency can translate into a greater ability of the corporatized entity to deal with equity concerns. The 'not for profit' characteristic of the corporation entity may reduce political opposition to private concession under the corporation model. Ultimately, the answers to these questions would depend on the nature of the relationship between the city and the board of directors through a binding agreement and the regulatory mechanisms set up to provide oversight of this agreement.

Third, there are several CSOs who have opposed the concept of prepaid meter and privatization, creating a new organizational voice for those socially, economically and politically

marginalized under a neo-liberal regime. Their efforts were reflected in government policy in that the National Water Act has required all catchment management agencies to ensure representativeness of all stakeholders on the criteria for appointment of members of the governing boards of the catchment management agencies. In addition to CSOs with social beliefs, plenty of CSOs with ecological belief have been working for valuing water and integrated catchment management. Both groups of CSOs have successfully created spaces for civic engagement in water governance in cooperation with national and municipal governments. This indicates that policy learning across coalitions holding social and ecological beliefs makes synergetic impact on policy making and contributes to environmentally sustainable and socially equitable water governance.

3.4 METRO MANILA, PHILIPPINES: A FAST-GROWING CITY WITH OVERWHELMING POPULATION

Metro Manila is one of the most populated cities in the world with a population of 12 million people. President Ramos's office eagerly privatized the Manila's water entity, MWSS, based on the Water Crisis law and the Build-Operate-Transfer law which gave the government an authority to reform the MWSS. The processes of bidding and contracting during the MWSS' privatization involved international consultants and a research unit for transparency and profitability. Yet, the implementation of water privatization still suffered from the issues of incomplete information, unjustified debt distribution, and unforeseen events such as 1997 Asian Financial Crisis and the bankruptcy of Maynilad. The researcher of this study requested an interview to the Manila Water several times by phone and emails, but they circulated my request and did not respond.



Figure 12. Manila in Philippines

Source: Google Map

The Philippines has one of the fastest growing populations in Southeast Asia: From fifty million in 1980, the Philippines now has around hundred million people, especially with twelve millions living in the Metro Manila area (Philippines Statistics Authority, 2016). The Metro Manila refers to National Capital Region (NCR), the metropolitan area composed of 16 cities and is the most densely populated area in the world. The country is composed of more than 7000 islands and their water resource has been divided into 12 water resource regions which follow

hydrological boundaries defined by physiographic features and homogeneity of climate in the different parts of the country (Food and Agriculture Organization, 2011).

1) Policy stakeholders and their policy core belief on water

Table 18 shows the list of organizations and their core belief on water identified by the content analysis of this study.

Table 18. Classification of organizations and their core beliefs on water in Manila case

View on water	Grassroots CSOs	International CSOs	Public actors	Private actors
Economic good	Action for Economic Research (AER)	World Bank WHO Asian Development Bank UN, UNDP IMF AquaFed International Finance Corporation	U.S. Committee on Privatization Development Bank of the Philippines	Maynilad Water Manila Water Suez Benpres Holdings Betchel Ayala corporation United Utilities AsiaMoney United Utilities Mitsubishi DM Consunji Holdings Metro Pacific Investments Corporation National Economic Research Associates (NERA)
Social good	Philippine Water Vigilance Network (Bantay Tubig) Water for the People Network Progressive Alliance of Metro Manila Water Consumers (PATTAK)	Institute for Popular Democracy IBON Foundation Freedom from Debt Coalition (FDC)		Asian Labor Network Peace Equity Foundation

	Philippine Center for Water and Sanitation Streams of Knowledge Akabayans Citizens' Action Party Social Reform Taguig Agenda (SRTA)			
Ecological good	Fisherfolk alliance Pamalakaya Waves for water Philippine Partnership for the Development of Human Resources in Rural Areas (PhilDHRRA)			
Sector			Philippine government Department of Finance Department of Public Works and Highways MWSS National Water Resources Board (NWRB) Philippine Economic Zone Authority UNDP	Inpart Waterworks and Development Company Philippine National Bank Banco de Oro Keppel Duetsche First Metro Investment Corp Rizal Commercial Banking Corp BNP Paribas Citicorp International

Source: own analysis

Table 18 indicates that there are numerous organizations who participated in Manila's water policy subsystem, including different levels of governments, civil society organizations at local and international levels, and private companies. Especially, there are many finance organizations which support the finances of the private concessionaires and appear in media

reports. The concessionaires have been required to invest massive capitals for expanding and maintaining the water service. The bankruptcy of Maynilad is a result of their failure to gain loans from finance organizations.

2) Water policy subsystem

Among many stakeholders, the content analysis of Manila case reveals that in addition to the government of Philippines, two private actors, Manila Water and Maynilad, and an international actor, International Finance Corporation (IFC) earn high betweenness centrality as shown in Table 19. It indicates that the private and international actors actively participate in decision-making in the Manila case.

Table 19. Betweenness centrality of stakeholders in Manila water policy subsystem

Key Stakeholder	Betweenness centrality
GOP	59.08333
MANILA_WATER	31.00000
MAYNILAD	31.00000
MWSS	25.58333
IFC	14.08333
REGULATORY_OFFICE	2.25000

Source: own analysis, using R software

Figure 13 features key stakeholders and their interactions with other stakeholders for Manila case.

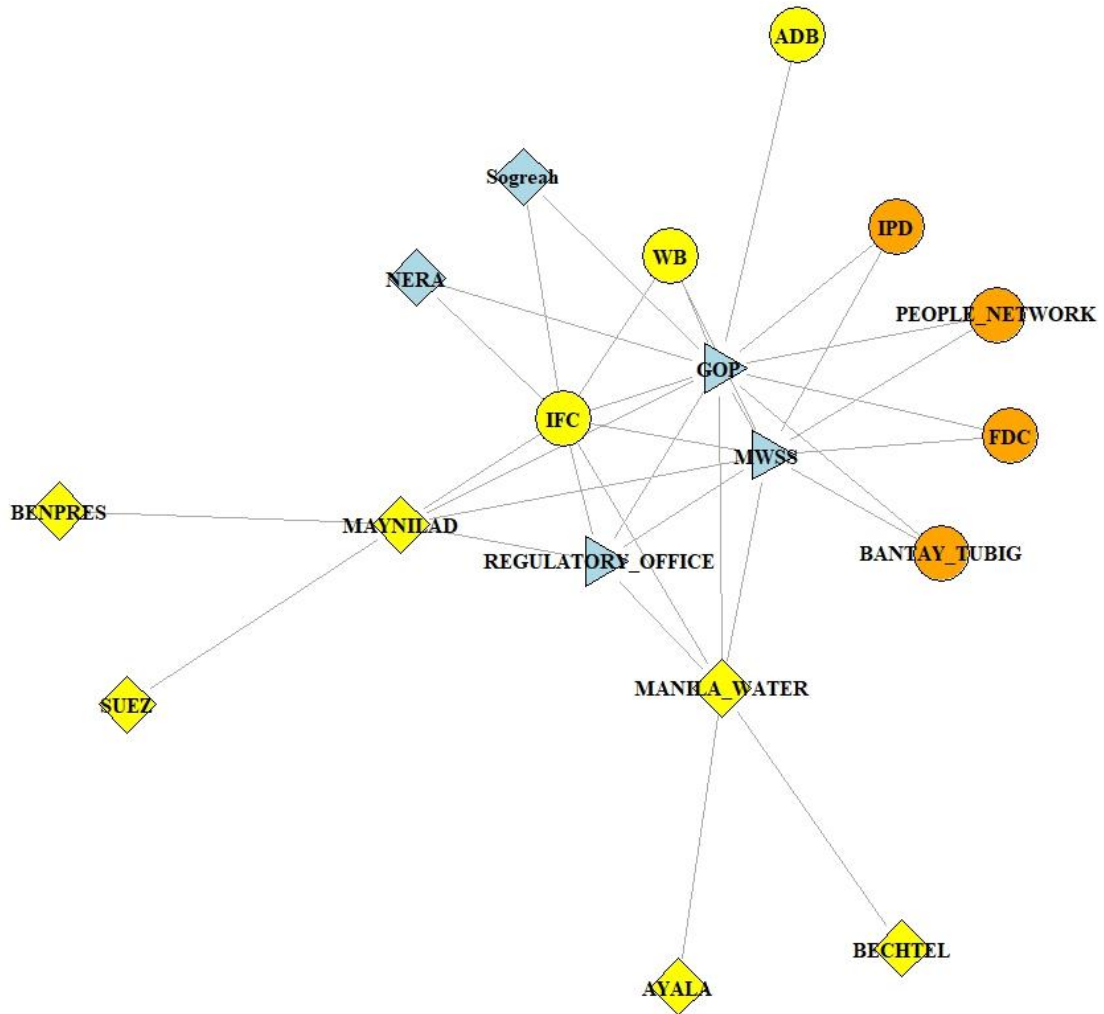


Figure 13. Key stakeholders and their interactions with other stakeholders within Manila water policy subsystem

Policy core beliefs: Brown represents the social belief; Blue represents administration belief; Yellow represents economic belief following Table 2 / local nonprofit in circle; international nonprofit in triangle; private in diamond; public in square / Ties among stakeholders mean relationship as explained in Page 16

Source: own analysis, using R software

Figure 13 shows that, similar to the Cochabamba case, the interactions among stakeholders in the Manila case are polarized between economic and social beliefs. During the bankruptcy of Maynilad, a number of civil society organizations including Bantay Tubig, and Freedom from Debt Coalition in Philippines called for re-municipalization of the MWSS, but the government re-privatized the MWSS and granted the concession to a local consortium. The researcher of this study could not find much interaction among the civil society organizations, implying that the political leverages of civil society organizations and their social mobilization in water governance are not yet matured. Figure 14 shows the variables captured under the Advocacy Coalition Framework for Manila case.

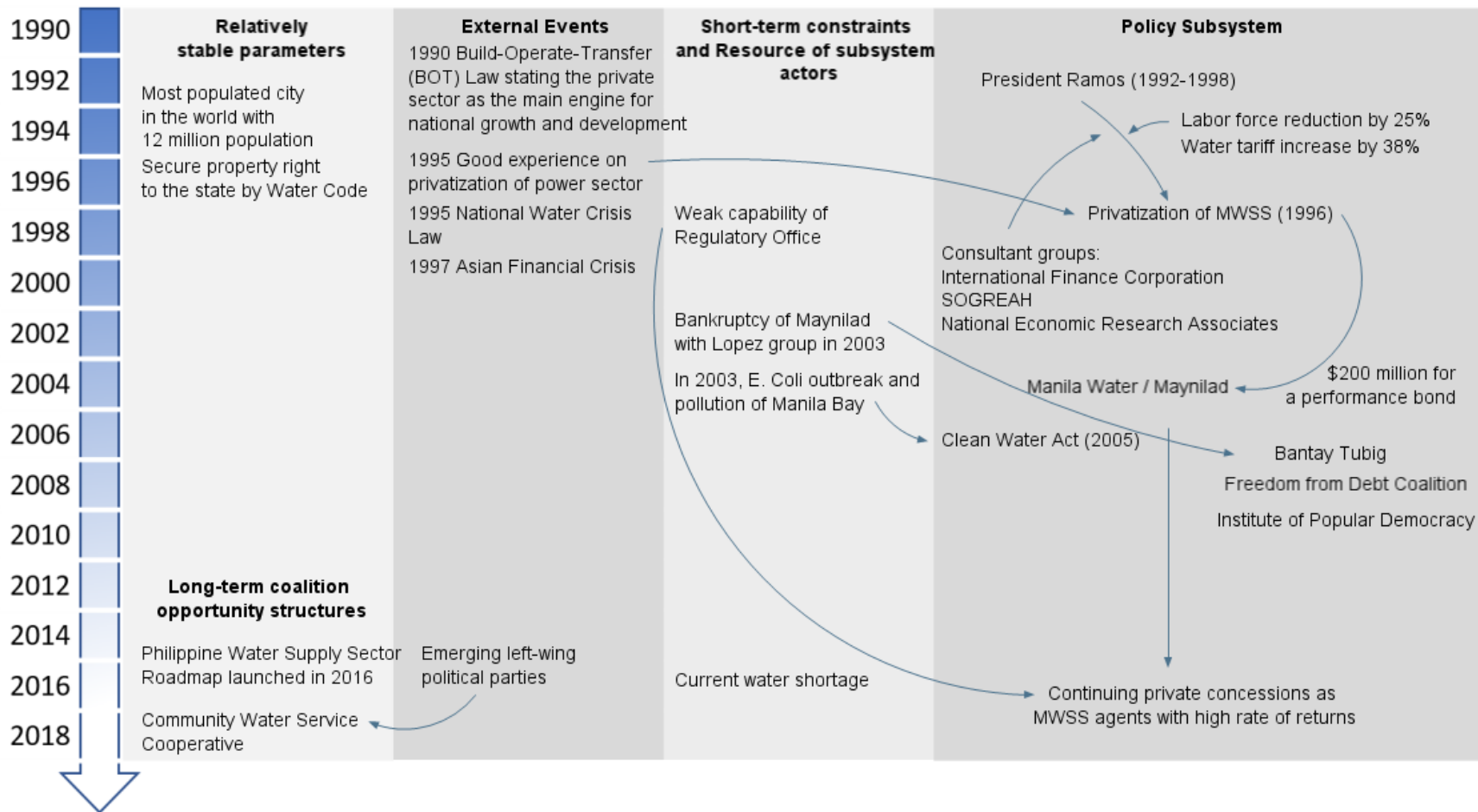


Figure 14. Variables captured under the Advocacy Coalition Framework for Manila case

Arrows indicate causal relationship between variables

Source: own analysis, using AnyLogic software

3) Before privatization of MWSS

Philippine laws have had various nomenclature designations at different periods in the history of the Philippines. During 1972-1986, Philippine laws of the republic government under Martial Laws were called President Decree. There were three Presidential Decrees that had governed water resource in Philippines before 1987 constitution: the Presidential Decree 1067 (Water Code), the Presidential Decree 984 (Pollution Control Law), and the Presidential Decree 825 (Environmental Code). They were established in 1976-1977 and provided guidelines on natural resource management for decades. Especially, the Water Code has reiterated that the water belongs to the state and should not be the subject of acquisitive prescription. The code has permitted water concession and has reiterated that the measure and limit of appropriation of water should be its beneficial use. Based on the Presidential Decrees, the National Water Resources Board (NWRB) was instituted and has consolidated the laws governing water resource regarding its ownership, appropriation, utilization, exploitation, development, conservation, and protection since 1974.

Prior to the privatization of MWSS, the Philippine government passed two laws to grant itself the authority to privatize MWSS: the Build-Operate-Transfer (BOT) Law (Republic Act No. 7718) enacted in 1990 and the National Water Crisis Law (Republic Act No. 8041) enacted in 1995. The BOT law has authorized the financing, construction, operation and maintenance of infrastructure projects by private sectors, and was amended in 2012. Table 20 is the brief statement of the BOT law (Republic of the Philippines, 2012).

Table 20. Brief statement of the Build-Operate-Transfer law

<p>Section 1. It is the declared policy of the State to recognize the indispensable role of the private sector as the main engine for national growth and development and to provide the most appropriate favorable incentives to mobilize private resources for the purpose.</p> <p>Section 3. Private Initiative in Infrastructure: All government infrastructure agencies, including government-owned and controlled corporations (GOCCs) and local government units (LGUs), are hereby authorized to enter into contract with any duly prequalified private contractor for the financing, construction, operation, and maintenance of any financially viable infrastructure facilities through the build-operate-transfer or build-and-transfer scheme, subject to the terms and conditions hereinafter set forth.</p>
--

Source: Republic of Philippines, 2012

In addition to the BOT law, the government enacted the Water Crisis Act which authorized the President to re-organize MWSS, including the privatization of any or all of its segments, operations, or facilities under the object of making them more effective and innovative to address the looming water crisis. Table 21 is the brief statement of the Water Crisis Law adopted from Chanrobles website (Chanrobles, 1995).

Table 21. Brief statement of the Water Crisis Law

<p>Section 4. Purposes and Objectives</p> <p>The Commission shall have the following purposes and objectives: a. to undertake nationwide consultations on the water crisis and in depth and detailed study and review of the entire water supply and distribution structure;</p>
--

Section 6. Negotiated Contracts

For projects to be implemented under BOT and/or related schemes, **the President** may, for one year after effectivity of this Act, **enter into negotiated contracts** for the financing, construction, repair, rehabilitation, improvement, and operation of water facilities and projects related to increasing water supply, its treatment and its distribution to industrial and household consumers: Provided, that there is **no government financing** or financing guarantee for the contracts except for the acquisition of right-of-way.

Source: Chanrobles, 1995

These two laws, the BOT law and the Water Crisis law, were the main basis for the privatization of MWSS to occur and be supported.

Distribution of risk between the government and concessionaires

Before the privatization, the government attempted to distribute the potential risks of the MWSS privatization by three folds: increasing water rate, decreasing the MWSS labor force, and setting up performance bonds.

First, the government decreased the MWSS labor force by 30-percent, five months before the MWSS privatization. Dumol noted that the reduction in the labor force was a key feature of the transaction and one of the most difficult issues concessionaires would have to deal with to achieve efficiency of MWSS (Dumol, 2000). Based on the Water Crisis Act, in which the reforms were exempted in the provisions of Attribution Law and Salary Standardization Law, the MWSS offered their employees compensation package, tax-free severance pays, and termination-and re-hiring process, smoothly reducing labor force before privatization. Dumol's evaluation of this

process is that “it gave the future concessionaires a much freer hand in running the business. The fact that all employees were going to start from scratch with the concessionaires also gave great comfort to the bidders...this significantly contributed toward soothing the bidders and reducing their perception of the risk of the transaction. Ultimately, all of these helped reduce the bid prices” (Dumol, 2000).

In addition to labor force reduction, the water tariffs were increased by about 38-percent five months before privatization took place. Mark Dumol stated that “tariff increase was actually long overdue and would have been implemented regardless of privatization. Nevertheless, it gave us a substantially greater chance that the bids would be lower. More important, it conceptually set the tariffs at the correct level prior to privatization. This gave us a fair chance to prove that the bid tariffs would be lower than the current tariff because of the much higher efficiency of the private sector. This theory would certainly not work if the current tariffs were way below what they should have been or if utility operations were subsidized” (Dumol, 2000). He also explained that the tariff increase was actually ready for implementation by the MWSS Board earlier but President Ramos tried to avoid political risk of implementing a controversial tax law and water tariff increase at the same time (Dumol, 2000). So, the tariff increase was delayed but took place before privatization along with a campaign of leak repairs to justify the increase. These reforms on tariff and labor force were proof that the government had the political will to do painful reforms on MWSS in the first place and comforted bidders with respect to the risks of involvement.

To reduce the risk on the government side, the government also required each concessionaire to put up \$200 million for a performance bond which would work as a kind of insurance money that the government could forfeit in case of unfulfilled contract obligation of concessionaires. These three institutional arrangements of tariff increase, labor force reduction,

and establishing performance bonds before MWSS privatization indicate that the Philippines government attempted transparency in their effort on MWSS reforms and built a safeguard for themselves.

3) Policy change: Privatization of the MWSS led by President Ramos

The privatization of MWSS was initiated by the central government, especially by President Fidel Ramos (1992-1998). Facing the high demands of a growing population, President Ramos released the “Philippines 2000” plan, a blueprint for economic growth, in 1992. Then the Ramos administration introduced competitive bidding in privatizing public utilities including Metropolitan Waterworks and Sewerage System (MWSS), water service entity in Metro Manila and power plants. At that time, the MWSS was characterized by high inefficiency and lack of management capability; it had a US\$880 million debt and was unable to provide water to one-third of all households (Asian Development Bank, 2012). The households actually connected to the service had an intermittent supply of 17 hours a day on average and non-revenue water was around 60-percent of water produced (Asian Development Bank, 2012).

President Ramos was authorized and empowered by Water Crisis Law and set the water crisis and the reform of MWSS as the priority. The Water Crisis Law was powerful in a sense that reform conducted by the president and the Board of Trustee was exempted from the provisions of the Attribution Law and the Salary Standardization Law. The law authorized the president to obtain all powers to abolish or create offices, transfer functions, equipment, properties, records, and personnel without compensating to existing salaries or benefit of MWSS employees, which would result in a drastic cost-cutting and other related measures under the purpose of MWSS reform. Mark Dumol, a former chief of staff of the Secretary of Public Works and Highways,

noted in his book that “president Ramos tremendously contributed [to] the advancement of the MWSS and was particularly indispensable in terms of making people aware of the water crisis and developing a consensus on the need to address it” (Dumol, 2000).

The MWSS was handed over to two private companies in 1997 under 25-year concessions: 1) the east zone of Manila was granted to Manila Water, a joint venture consisting of Ayala (a Philippines conglomerate), United Utilities (a U.K. corporation), Bechtel (a U.S. corporation), and Mitsubishi (a Japanese corporation); 2) the west zone was granted to Maynilad Water Services Inc, initially a joint venture between Benpress Holdings Corporation and Suez. In 2006, due to financial struggle, Maynilad sold 84-percent of the company to the Philippine Government and the government sold their share to DM Consunji Holdings, Inc (DMCI), a consortium of the Filipino construction company, as well as Metro Pacific Investments Corporation (MPIC), a Filipino real estate company in the same year.

Institutional arrangement to support MWSS privatization- 1) the third-party consultants for bidding and agreements

The decision for MWSS privatization was led by a top-down approach, but the process of privatization was carefully designed and proceeded by multiple key actors. First, the government hired the International Finance Corporation (IFC) and SOGREAH as external consultants for privatization process. The IFC, as an arm within the World Bank, had been playing a crucial role in private sector development and attempted to balance between interests of private companies and the Philippines government. Presidential approval has been given for the appointment of the IFC as a lead advisor and the IFC prepared operating and investment agreements and supervised the competitive bidding process. Throughout the assignment, the IFC also coordinated and integrated

the work of all consultants, including SOGREAH. The SOGREAH is a French consultant which provided technical consulting to the Philippines government, particularly for the bidding process. When the government decided to bid out the MWSS, they looked for a grant to support the bidding process. They failed to get grants from the World Bank, the Asian Development Bank, and the United Kingdom's DTI, but finally got one from the French government (Dumol, 2000). With the grant, the government hired a French consulting firm, SOGREAH, recommended by the French government. The Philippine government accepted the recommendation particularly because the company was not connected with any French water companies who might join the bidding (Dumol, 2000). The government also had MWSS to get a loan from a national government to facilitate the bidding process and planned to pay back with \$10 million "commencement fee" that they would charge on winning bidders. The SOGREAH advised the government for transparent and careful bidding process in that all bidders should comprise a Filipino and an international company and the Filipino local companies had to be prequalified based on financial capacity, perceived knowledge, and experience with large projects (Circle of Blue, 2012).

Institutional arrangement to support the MWSS privatization - 2) split of the service zone for creating competition and comparison

Following the IFC and SOGREAH's advice, the government split the MWSS service area into two zones despite complications arising from the split. There were pros and cons of doing this. The pros involve the ideas that the government could compare costs of concessionaires and the competition between two concessionaires would give the government more leverage during negotiation and regulation development and practice. In addition, in case one concessionaire has financial and technical troubles, the other concessionaire could take over. Thus, SOGREAH split

the MWSS into the East and West zones based on serving population, profitable core, and an expansion area (Dumol, 2000). The cons involve the complications arising from having two concessions extend beyond the difference in the tariffs and interconnection agreement. Furthermore, the split of existing debt was an issue as well. Eventually, SOGREAH divided the service region into two and decided that the West region took 80-percent of debt and the East took 20-percent based on the conditions of existing infrastructure and the amount of investment needed for future development (Circle of Blue, 2012). Another drawback was the complication of having two headquarters, as well as the distribution of employees and the organization of the division. Finally, Dumol also noted that splitting the MWSS into two companies was financially inefficient given previously unified water and sewerage distribution system. Dumol, however, noted that it was useful in the evaluation of common petitions for price increases (Dumol, 2000).

Institutional arrangement to support the MWSS privatization -3) Tariff policy with National Economic Research Associates (NERA)

Before contracting was concluded, the government detailed tariff increases and duties. Another consultant for MWSS privatization came from National Economic Research Associates (NERA) and the consultant proposed to utilize a tariff escalation procedure, called "rate rebasing," which in theory helped concessionaires guarantee a certain rate of return and thus prevent bankruptcy. At the same time, the tariff increase procedure also provided the government with authority to determine the value of the return by evaluating appropriate discount rate given similar infrastructure projects in similar economies or countries. In sum, the tariff increase was officially set up in three cases:

- 1) Inflation: tariffs are adjusted annually on the basis of inflation in terms of consumer price index and appropriate discount rate set by the regulator
- 2) Extraordinary Price Adjustment (EPA): tariffs are adjusted to capture the financial effects of certain unforeseen events to the concessionaire. Hence, should there be a drastic devaluation of the Peso extraordinary price adjustments may be made. The EPA essentially provides protection to the company against a force majeure, or unanticipated costs arising from, for instance, new health or environmental standards that may be legislated in the future. The regulatory office would determine whether an EPA has indeed happened that necessitates price increases.
- 3) Rate-rebasing: tariffs are adjusted every five years to guarantee a certain rate of return to the private concession holder. The company's performance vis-à-vis regulatory targets is also considered in determining the tariff. The concession agreement provides for a review of tariffs so that they can be adjusted in case they exceed the definition of 'fair returns' stipulated in the contract. This gradual readjustment made every five-year cycle was designed to benefit both consumers and concessionaires subsequently from the concessionaire's efficiency gains.

As seen above, the detailed tariff increase procedure and agreement have been established to avoid as much ambiguity as possible. In addition, the contract also detailed the duties of concessionaires. The companies would have to lower the non-revenue water of two-third of water produced at time to 32-percent and 100-percent coverage of water access for the first 10 years, and capital inflow of \$7.5 billion for 25 years. The contract also required that the water should meet the quality standard set by government. In sum, the Philippine government, by involving external

adviser groups like the IFC, the SOGREAH, and the NERA, attempted to achieve the transparency of bidding and contract processes and to detail the tariff increase procedure at a reasonable level.

4) Coalition of stakeholders

4-1) A minimal opposition to the MWSS privatization

Opposition to privatization of MWSS was not observed in the content analysis of this study, but the dissertation of Chng reported that there were a few protests done by Ruth's water people's organization in Taguig City, protest groups in Caloocan City, and the NGOs in Metro Manila (Chng, 2013). These protests did not appear in major media and reports collected for the content analysis of this study, implying that the MWSS privatization was perceived as a viable alternative by general citizens.

The content analysis revealed that the experience of privatization in the power sector and lower tariff setting under private management model than public management model could be the reasons for minimal opposition to the MWSS privatization. First, previous experience of privatization in the power sector made privatization of MWSS to be perceived as a feasible option to address inefficiency of state-owned utility by both government officials and general citizens (South China Morning Post, 1993; The Associated Press, 1992; The Association Press, 1992). The state suffered from multiple power outages during 1992-1993 and the congress enacted the Power Crisis Law in 1993 which allowed the entry of independent power producers in the generation activity in the country. By making the Build-Operate-Transfer (BOT) arrangement and privatizing the power sector, the government increased electric power capacity and solved the outage issue by the end of 1994 (Patalinghug, 2003). Such a dramatic experience with power sector privatization contributed to the formation of a pro-privatization environment in Manila in mid-1990. This is an

example that experiences in other policy subsystems like the power sector influence the decision-making in water policy subsystem.

Another factor contributing to the minimal opposition to MWSS privatization is the lower tariff policy. During the bidding process, the government ensured that the bids would be equal to or lower than the previous tariff, which prevented political opposition and led smooth transition of publicly owned utility to private companies. The contract resulted in the private companies offering to do the work at considerably lower price than what customers were paying that time. In the East Zone, Manila Water offered to charge only one quarter (26.39-percent) of the existing rates, while in the West Zone, Maynilad offered to charge only half (56.59-percent) of the existing rate (Transnational Institute, 2005). Tariffs remained close to these low levels for five years until the first rate-rebasing took place in 2002, followed by further significant tariff increases.

External event: 1997 Asian Financial Crisis

Unfortunately, the agreements on tariff adjustment were incomplete and not exactly followed due in part to the devaluation of the Peso, Filipino currency, during the 1997 Asian Financial Crisis. There was a substantial depreciation of the Peso during the crisis which affected the companies' capacity to services the loans they inherited from MWSS (Transnational Institute, 2005). The concessionaires requested an extraordinary price adjustment within two years instead of five years, as had been stated in the original agreements. Then the government added the Foreign Currency Differential Adjustment, which applied accelerated extraordinary price adjustment and foreign currency adjustment as well as reduced the service obligations, to help concessionaires recoup foreign exchange losses over the past two years. After the adjustment, the Manila Water increased their water price by 64-percent and the Maynilad increased their water

price by 7-percent (Freedom from Debt Coalition, 2009). The greater rate increase for the Manila Water could be explained mainly because their bidding price was very low: only one quarter (26.39-percent) of the 1996 water rate, as described previously. Such premature rate-rebasing is seen to undermine the validity of the original bidding, and the Manila Water appears to have taken advantage of it by submitting a low bid and then increasing the rate substantially within two years (Corporate Accountability International, 2017).

Internal events: E. Coli outbreak, pollution on Manila Bay, and bankruptcy of the Maynilad

There were a few crucial incidents that called for re-municipalization of MWSS after privatization. The first incident was the E. Coli outbreak that happened in October 2003. A case in which 600 residents were sickened and six died with water provided by Maynilad (Freedom from Debt Coalition, 2005). Responding to this incident, Republic Act No. 9275 (2004), known as the Clean Water Act, was enacted to enforce water quality standards and regulations. Another incident was the pollution on Manila Bay. In 2008, the Supreme Court of the Philippines ordered several government agencies, including MWSS, to clean up the Manila Bay. The Court stated that the bay was polluted because of “the abject official indifference of people and institutions” (GMA News, 2008). Consequently, the concessionaires established the Manila Wastewater Management Project for sewerage and wastewater treatment, and got a loan of US\$275 from the World Bank in 2012 (World Bank, 2012).

Finally, the calling for re-municipalization increased during the issue of the bankruptcy of the Maynilad group. Despite the government’s effort to navigate MWSS concession for qualified concessionaires and an unambiguous agreement, it could not prevent the Maynilad from claiming

bankruptcy in 2003. The process of filing Maynilad's bankruptcy raised a lot of conflicts and debates. In March 2001, the Maynilad faced financial difficulties and left \$100 million of concession fee unpaid to the MWSS and the MWSS had to acquire a loan from Deutsche Bank to cover maturing loans to the World Bank, Asian Development Bank, and the Japan Bank for International Cooperation in May 2002. However, Maynilad still sought to terminate the contract in December 2002 and filed a case with the Arbitration Court, claiming that MWSS failed to deliver its part of the concession agreement. MWSS filed its countersuit and the International Arbitration Panel decided in favor of the continuation of the concession agreement in November 2003. Maynilad, however, filed a petition for corporate rehabilitation which prevented the MWSS from pulling \$120 million of the performance bond that Maynilad had deposited at Citicorp International. When the Supreme court decision was not made yet, Maynilad and MWSS officials declared a joint statement for settlement. The settlement stated that MWSS would draw only \$50M of the \$120M performance bond and \$70 million of the performance bond would be foregone. The settlement also stated that no further legal action should proceed regardless of the Supreme Court decision. Then, a huge debate arose whether the MWSS was compensated enough and whether the government gave up the remaining performance bond too quickly before the court ruling (Freedom from Debt Coalition, 2005; WaterAid, 2003). Several months after the settlement, the Supreme Court decision gave the government strong leverage to deal decisively with Maynilad with respect to their concession fees. The government explained that they urged to make a quick settlement before the Supreme Court decision because of the threat of service interruptions in the West zone.

4-2) Increasing grassroots CSOs against the settlement between the government and the Maynilad

In the middle of the conflict between the Maynilad and the government, many civil society organizations opposed the settlement and accused the government of freeing the Lopez group, which was mainly responsible for the Maynilad management from contingent liabilities and debt, at the cost of taxpayers. Bantay Tubig, for example, strongly argued that the MWSS should draw on the entire performance bond and take over the water utility to public hands rather than looking for another private concessionaire (Bantay Tubig, 2004). They also called on the Lopez group to pay its liabilities to the government. The reports from the Public Citizen and the Freedom from Debt Coalition highlighted that contract renegotiations, including tariff increases, burdened customers and were a clear indication of privatization's failure, and thus led them to advocating for a public water provision (Freedom from Debt Coalition, 2005; Public Citizen, 2003b). Such oppositions to contract re-negotiation and bailout, however, could not stop the government from continuing to seek private concessionaires for MWSS. Maynilad filed for bankruptcy in 2003 and the services were handed back to MWSS in 2005. MWSS ran the system for two years and then bid the concession out to local consortiums of DM Consunji Holding (DMCH) and Metro Pacific Investments Corporation (MPIC) in 2007. The continuing privatization of the MWSS indicated that the civil society organizations in Philippines have not obtained strong enough leverage to change water policy, though the grassroots social mobilization toward re-municipalization is getting more courageous and stronger. Several 'Community Water Service Cooperative' at local communities were formed under the influence of civil society organizations (Chng, 2013).

Manila Water vs Maynilad

The Manila case raised a crucial question why Maynilad failed but Manila Water succeeded. There are several analyses to explain the outcomes. The first reason for the Maynilad failure lies on the difference in the distribution of the historical debt of the MWSS. The Maynilad oversaw 80-percent of the debt of MWSS while the Manila Water only oversaw 20-percent. The intention of the government was to share the debt burden more equitably between the two concessionaires based on technical and financial reports (Dumol, 2000). Yet, Maynilad's financial burden was devastating especially when the devaluation of the Peso hit the country. Secondly, the west zone under the Maynilad's management, compared to the east zone under Manila Water's management, contains a much greater area that requires capital investment to increase connection to low-income populations (WaterAid, 2003). Thirdly, the failure of the Maynilad arose from inaccurate information given by the government during the bidding process. The information on the length of the distribution network to be maintained in the bid document was 2534 kilometers, but the actual length was 3880 kilometers, making it difficult for the Maynilad to manage their financial situation (WaterAid, 2003). In addition, the two companies utilized different financing models. While Manila Water resorted to corporate finance by putting the assets of its owners Bechtel and Ayala Corporation at stake, Maynilad used project-based finance to request a term loan (Circle of Blue, 2012). This meant that in terms of obtaining a loan, the credit and reputation of Manila Water matters whereas the receivables of the project itself needs to be secured for Maynilad, which was more influenced by rate rebasing and regulations. This difference led Maynilad to fail to finance capital expenditures in the first five years of operations (Circle of Blue, 2012). Lastly, different approaches between Maynilad and to non-revenue water caused different outcomes. Non-revenue water was 61-percent before privatization. In 2003, Manila Water

launched “Water for the Community” where the company provided community pipelines at a fixed installation cost and the low-income communities paid below what MWSS charged its customer base. The program allowed Manila Water to gain popular support and meet the government's directives under the concession agreement and the company successfully reduced its non-revenue water usage to 27.5-percent in 2004 (Kapoor, 2015). In 2005, Manila Water’s customer base doubled and in 2006, all customers of Manila Water had twenty-four hour water access. On the other hand, Maynilad monitored water distribution system and penalized water theft. This threatening and enforcement strategy did not work effectively and non-revenue water in west zone deteriorated to 68-percent in 2003 (Public Citizen, 2003b). The different experience of non-revenue water between Manila Water and Maynilad illustrates that community involvement and cooperation are the keys for success in water privatization.

Manila Water, based on the improvement of revenue, gained the trust of investors and obtained a US\$30 million loan from the International Finance Corporation (IFC) in 2003, followed by two more loans of the same amount (IFC, 2008). This helped the Initial Public Offering (IPO) of the company's shares on the Manila stock exchange in 2004, the first IPO since the 1997 Asian Financial crisis. The IPO raised nearly US\$100 million and Manila Water issued several local currency bonds in 2008 (Asia Law, 2005). The Maynilad's new owners began to invest more heavily and made progress on service improvement. During 2007 and 2011, the population served from the Maynilad increased from 6.4 to 7.8 million and non-revenue water decreased from 67-percent to 47-percent (Maynilad, 2012). In 2009, Manila Water's concession was extended until 2037 instead of 2022 as stated in the initial agreement (ABS CBN News, 2009). In 2010, Maynilad's concession was also extended until 2037 (Manila Bulletin, 2010).

Institutional arrangement for participatory management - The Philippine Water Supply Sector Roadmap

In 2016, the MWSS launched “The Philippine Water Supply Sector Roadmap,” which was initiated by a joint effort of the National Economic Development Agency and National Water Resources Board, together with various sector stakeholders, such as national government agencies, water service providers and non-governmental organizations. They state that “it seeks to address the gaps and challenges previously identified by various sector studies conducted by international development agencies and research institutions, statistical data from the National Statistics Office as well as monitoring data from various government agencies such as the Department of Interior and Local Government, Local Water Utilities Administration and the National Water Resources Board.” It is too early to evaluate the impact of the program, but at least, it has created for participatory governance of various stakeholders including civil society organizations. Several water cooperatives have been formed for community-based water management under the increasing left-wing political parties such as Akbayan Citizens’ Action Party and Social Reform Taguig Agenda (SRTA).

5) Challenges to current water policy under private management

5-1) Weak regulating entity under pressure of transnational companies

The Regulatory Office has played a very important role especially in interpreting the contract agreement, managing the subjective nature of tariff adjustments, and determining the appropriate discount rate in MWSS privatization. They have also been regulated concessionaires with respect to all their obligations under the concession agreement. Ideally, the Regulatory Office needed to be financially and politically independent of both the concessionaires and the MWSS

because it needed to judge on matters of dispute in a disinterested manner. However, in the case of Manila, the Regulatory Office was set up within the MWSS. Since the office was created in the middle of the privatization process, it did not provide for transparency or public involvement. More importantly, the Regulatory Office has been funded by concessionaires. Freedom from Debt Coalition questioned how such a regulator office, funded by private companies and existing within the same buildings as these companies, could possibly work effectively for the goal of regulating the private companies (Freedom from Debt Coalition, 2005).

The weak authority of the Regulatory Office under the politically constrained and financially dependent environments resulted in conflicts and arguments on the determination of water tariff, the rate of return, and the identity of the MWSS as a public utility. For example, during the rate rebasing process starting in 2013, the Regulatory Office ordered Manila Water and Maynilad to reduce their water tariff by 29.47-percent and 4.82-percent, respectively. It claimed that the concessionaires were unable to justify the need for higher rates based on their business and investment plans (GMA News, 2013). The concessionaires appealed against the decision at the International Chamber of Commerce which allowed Maynilad to increase its water tariff by 9.8-percent. Since 1997, when the concessions were granted, the bidding rates increased for the Manila Water by more than six times and for the Maynilad by more than four times after inflation adjustment (MWSS Regulatory Office, 2017). Compared to the water rate of pre-privatization, water rates in the east and the west zone are a little more than two times after inflation adjustment (MWSS Regulatory Office, 2017).

Another issue lies in the identity of the MWSS as a publicly owned entity under the corporation model. The rate of return for Manila Water in the agreement was only 5.2-percent, whereas the rate of return for the Maynilad was 10.4-percent. Later, the Manila Water increased

its rate of return to 9.3-percent through international arbitration (Freedom from Debt Coalition, 2009). However, it is reported that the Manila Water earned nearly a 41-percent rate of return in 1999, even though only 12-percent-profit is allowed for public utilities under the coverage of public service law (Freedom from Debt Coalition, 2009). The board of the Regulatory Office issued the resolution that deemed Manila Water and Maynilad entered into an agreement with MWSS on the understanding that they would be mere agents of the public utility and the limit of 12-percent profit would not be applied to agents. Then, water advocates, led by the Freedom from Debt Coalition and Bantay Tubig, filed a petition seeking to invalidate the resolution (PCIJ, 2006). The higher profit-making of private concessionaires defeats the essence of publicly owned service, and the resolution declaring that the two water concessionaires are mere agents and contractors of the Regulatory Office, leads to the question if the Regulatory Office acts in favor of the interests of concessionaires.

5-2) Water shortage since 2018

Since 2018, Manila has suffered from water shortage. Manila Water explained that the problem was lumped with the effects of El Niño and the delay of water infrastructure projects, such as the construction of a wastewater treatment plant in Cardona, Rizal and the Kaliwa Dam in Tanay, Rizal (ABS CBN News, 2019). Then, current President Rodrigo Duterte castigated officials of the MWSS, Manila Water, and Maynilad over the water shortage and threatened to terminate the contract with concessionaires (GMA News, 2019). He claimed that “the officials knew of the problem leading to the water shortage but they did not resolve to prevent it from happening” (GMA News, 2019). However, the current shortage is not only the outcome of El Niño or delayed supply project, but is also the outcome of a lack of water conservation and

integrated water management approaches. Since the concessions were granted in 1997, the number of connections have tripled and the needs for business and agriculture have kept growing as well (ABS CBN News, 2019). Without conservation and integrated water management strategies, which seems to be absent in Manila's water policy under private operation, the shortage would likely continue with increasing population and business. The strategies require a series of processes to promote the coordinated development and management plan on water, land, and related resources. They are often beyond the capability of single water entity like the MWSS, and therefore the coordination should be led by the central government for multiple jurisdictions and levels of governments, user groups, developers, and civil society organizations. The current water shortage in Manila raises a concern about the dependency of the government on private concessionaires and lack of management capability in their end.

6) Conclusions

First, the Philippines government aggressively passed the Water Crisis Law and authorized President Ramos to conduct the reform of MWSS, indicating that Manila water policy to privatization was not the outcome of coalition formation as assumed in the ACF. The government attempted to seek a transparent bidding process, qualified concessionaires, and unambiguous contract agreements by hiring external consultants for technical and financial advice. Their efforts resulted in creating two separate service zones for quasi-competition, the creation of the Regulatory Office, and a detailed tariff adjustment policy coupled with a performance bond. Yet, incomplete information, unjustified debt distribution, and unforeseen events such as 1997 Asian Financial Crisis resulted in the bankruptcy of Maynilad. While the service improvement and profit

made by Manila Water proves the potential success of privatization, the bailout of Maynilad ironically represents a failure of privatization.

Second, during the bailouts of Maynilad, several civil society organizations with social belief such as Bantay Tubig and Freedom From Debt Coalition called for re-municipalization of the MWSS, but did not succeed in making a policy change to the public model. The low water tariff initially submitted by private concessionaires and the positive experience in the power sector under the private management model supported the belief that the private model would work in Manila's water management. This confirms that policy core belief from another subsystem like the power sector influences the decision-making in the water policy subsystem.

Third, the government claimed that the MWSS regulatory office took adequate measures in determination of rebasing and adequate discount rate to ensure the concessionaires could not increase water rate impulsively. Yet, the office has been funded by concessionaires, implying that the office has not been independent from influence of concessionaires. Several incidents such as 2003 E.Coli outbreak, pollution of Manila Bay, and current water shortage prove that stronger government regulation and enforcement, as well as coordination for integrated water resource management, are necessary for the stability and success of water policy under private operation in Manila.

4.0 COMPARATIVE ANALYSIS

As discussed previously, the goal of this study is not to generalize outcomes of policy but rather to provide rich, contextualized understandings of water privatization and re-municipalization experiences through the case studies. Yet, in an environment where evidences for improving policy making and implementation are held in high esteem, policy makers and researchers would be benefited by comparative analysis derived from four cases of this study in relation to policy implications and knowledge claims. For this purpose, Figure 15 presents network maps of the four cases in this study that show key stakeholders, their core beliefs on water and jurisdiction, and their interactions among each other.

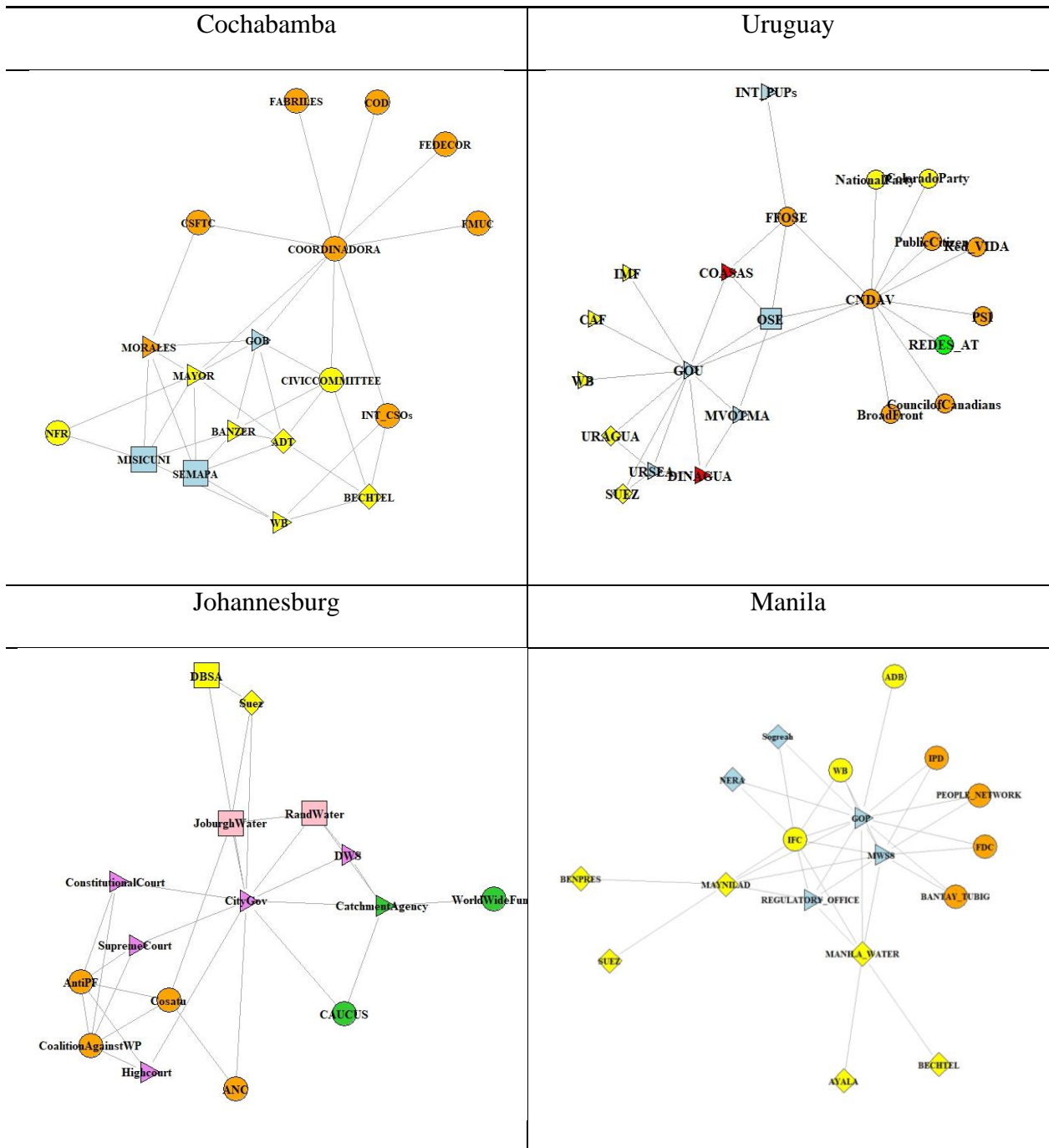


Figure 15. Key stakeholders and their interactions with other stakeholders in four cases

Brown represents the social belief; Blue represents administration belief; Yellow represents economic belief; Green represents ecological belief following Table 2; Purple and pink in Johannesburg map represents governmental and corporation units, respectively; Red in Uruguay map represents venues for coordination and participatory spaces / nonprofit in circle; public in

triangle; private in diamond; state-owned in square / Ties among stakeholders mean relationship as explained in Page 16

4.1 INCREASING POLITICAL LEVERAGE OF CIVIL SOCIETY ORGANIZATIONS IN WATER POLICY SUBSYSTEM

Figure 15 indicates that a number of civil society organizations (CSOs) at local levels participated in water policy making and they often created a powerful coalition like the COORDINADORA in Cochabamba and the CNDAV in Uruguay. The civil society organizations rising against water privatization in four cases of this study appear that they are rooted at local and national levels, and do not originate in international CSOs, though many national campaigns have been supported by international CSOs for publicizing the anti-privatization campaign and leveraging power against the transnational private companies. Several sources also confirm that there has been increasing grassroots social mobilization toward public provision of water empowered by civil society organizations at the local level (Khagram, 2004; Nelson, 2015). In the case of Cochabamba, for example, a variety of CSOs at the local level participated in Coordinadora and led the re-municipalization of the SEMAPA through a series of massive protests. International CSOs influenced the decision-making over Bechtel's dispute against the Bolivian government at the World Bank's International Center for the Settlement of Investment Dispute (ICSID) by forming activist networks and maximizing solidarity actions. Their actions resulted in the cancellation of the Bechtel's dispute and helped the Bolivian government to re-municipalize the SEMAPA without a financial penalty. Similar to Coordinadora, CNDAV in

Uruguay, and Coalition Against Water Privatization in South Africa have been playing a crucial role in advocating public provision in their water policy subsystem.

4.2 DIFFERENT LEVELS OF CORE BELIEFS TOWARD PRIVATE AND PUBLIC PROVISIONS

1) Strong economic core belief held by the World Bank

Some key stakeholders prove to have a stronger policy core belief toward private provision than others. President Banzer in Bolivia and President Ramos in Philippines, for example, actively adopted the pro-privatization policies of previously state-owned facilities during their presidencies. Their economic belief is in line with the World Bank, which has attempted to translate their economic belief that water is an economic good and thus needs to be managed by market-oriented approaches, and who has worked to integrate this belief into the client nation's water policy through their loan conditionalities. Such a normative core belief of this economic belief held by the World Bank is studied by several resources which describe the World Bank as "a partial learner" who seems to be unable to resolve contradictions among its espoused development goals, profit-making imperative, and neoliberal ideology (Storey, 2000; Travis, 2011).

2) Weak economic core belief addressing that private concession as only a tool to solve issues in water management

All decisions to private concession are not necessarily connected to the core economic belief, which challenges the assumption of the ACF that policy is made by the interaction of policy

participants who strive to translate components of their belief systems into actual policy. For example, the private concessions in Johannesburg and Uruguay are less influenced by the belief systems held by those governments. The government of Johannesburg, under the South Africa Constitution that clearly recognizes a human right to water, has created a corporation entity, Johannesburg Water, to deal with non-revenue water and a non-payment culture leftover from the Apartheid era. Therefore, the decision of private concession of the Johannesburg Water lies on their focus on the issue of cost recovery rather than their core belief of the social belief. The concession in Johannesburg Water ended in five years and was not renewed, confirming that the concession was utilized as a temporary tool and not followed by a core belief of the economic belief. In case of Uruguay, the private concession was granted only limited areas in the department of Maldonado for the purpose of financing expanded service project. Therefore, the private concession in Uruguay is seen as a government's response to urgent needs of expanding water service rather than the outcome of their belief. That is, the level of belief toward the private concessions hold by the Uruguay and Johannesburg governments is not normative like the deep core belief held by the World Bank, but closer to the secondary belief which is more substantive and empirical based. If new experience and information raises a concern on water quality and maintenance issue under private provision, governments with a weak secondary belief toward private concession would likely give up their current privatization policy and return their water entity to public hands, such as the case of Uruguay. The different levels of core belief toward water privatization explain why the water privatization policy continues in some places but discontinues in other places.

3) Strong demand for public provision from those who hold social and ecological beliefs

The cancellations of private concessions in Cochabamba and Uruguay confirm that the decision to re-municipalize their water entity is the result of a coalition among stakeholders advocating public provision as an alternative policy. For example, in the case of Uruguay, a variety of civil society organizations (CSOs) participated in CNDAV and successfully turned over the decision of private concession through 2004 water referendum. The cancellation of private concession in Uruguay proves that it is supported by coalitions with two different policy core beliefs. In detail, the CNDAV with heterogeneous member groups called for not only a human right to water, but also emphasized environmental issues, integrated management of water resources, and public participation. Especially, CSOs with ecological belief such as REDES-AT (Friends of the Earth-Uruguay) called for environmental justice by addressing the need of preserving and protecting aquifer for water as a social and ecological good. The integrated approach of the CNDAV against the water privatization demands a public provision to address environmental and socioeconomic inequity compatibly, successfully creating the linkage between the social and ecological beliefs. Their strong core beliefs toward public provision have been reflected in the new constitution amended in Uruguay. Similar to Uruguay, Bolivia and South Africa implemented the beliefs that water is a social and ecological good and require the public provision of water management in their constitutions. The private concession is still available under the public water utility in these countries, but the government still maintains the legal obligation to protect, respect, and fulfill the human and environmental right to water.

4.3 POLICY TOWARD PARTICIPATORY GOVERNANCE BY MULTIPLE STAKEHOLDERS

The amended constitutions in Uruguay and South Africa incorporates not only a human right to water, but also enhanced mechanisms and institutions for participatory governance in water management. Uruguay, for example, created institutionalized civic spaces such as COASAS and DINAGUA (marked in red in Figure 15) for multiple stakeholders' participation and coordination among different levels and jurisdiction of governments. Similarly, the Catchment Management Forum and the Water and Sanitation Forum in South Africa have served as a civic space for participation. When it comes to putting the emancipatory elements of the constitution into practice, there are many limiting factors, such as social conflict and polarization as observed in the 2007 Social Unrest in Cochabamba. It is too early to evaluate the participatory approaches at this point. Empirically, Flynn et al. examines Irish government which has attempted to cope with participatory features of the Water Framework Directive (2000) in their water policy through greater formal and informal local and national networking. They report that they see little evidence of change in values, beliefs and preferences, which are confirmed in their study as slow to change. This indicates that signs of policy learning and reconciliation through participation appear weak and too early to discern (Flynn et al., 2003). Yet, the Advocacy Coalition Framework argues that such emancipatory elements of constitutions and policies improve, in theory, the degrees of consensus and openness of political systems and ultimately are expected to contribute to long-term stability of policy subsystem.

4.4 POLICY LEARNING WITHIN AND ACROSS COALITIONS

The turnaround of the African National Congress (ANC) from driving nationalization agenda to corporatization model with providing free basic water in the post-Apartheid era indicates that policy learning takes in place within a coalition and challenges the assumption of the Advocacy Coalition Framework that policy core belief is hardly mutable. The policy learning occurs across coalitions in the South African government seem to strike a balance among stakeholders with different beliefs on water by forming close interactions and opening a civic space for participation. This policy learning across coalitions in South Africa resulted in contradicting institutional arrangements, such as the Free Basic Water, the Increasing Block Tariff, and prepaid meter installation. These contradicting institutional arrangements do not mean that the government's approaches to water management are 'apolitical' but are a more antagonistic and collective decision-making aspect of environmental politics.

This study also confirms that policy learning can occur across countries. Figure 16 shows the timeline of major policy changes and events in the four case studies for comparison.

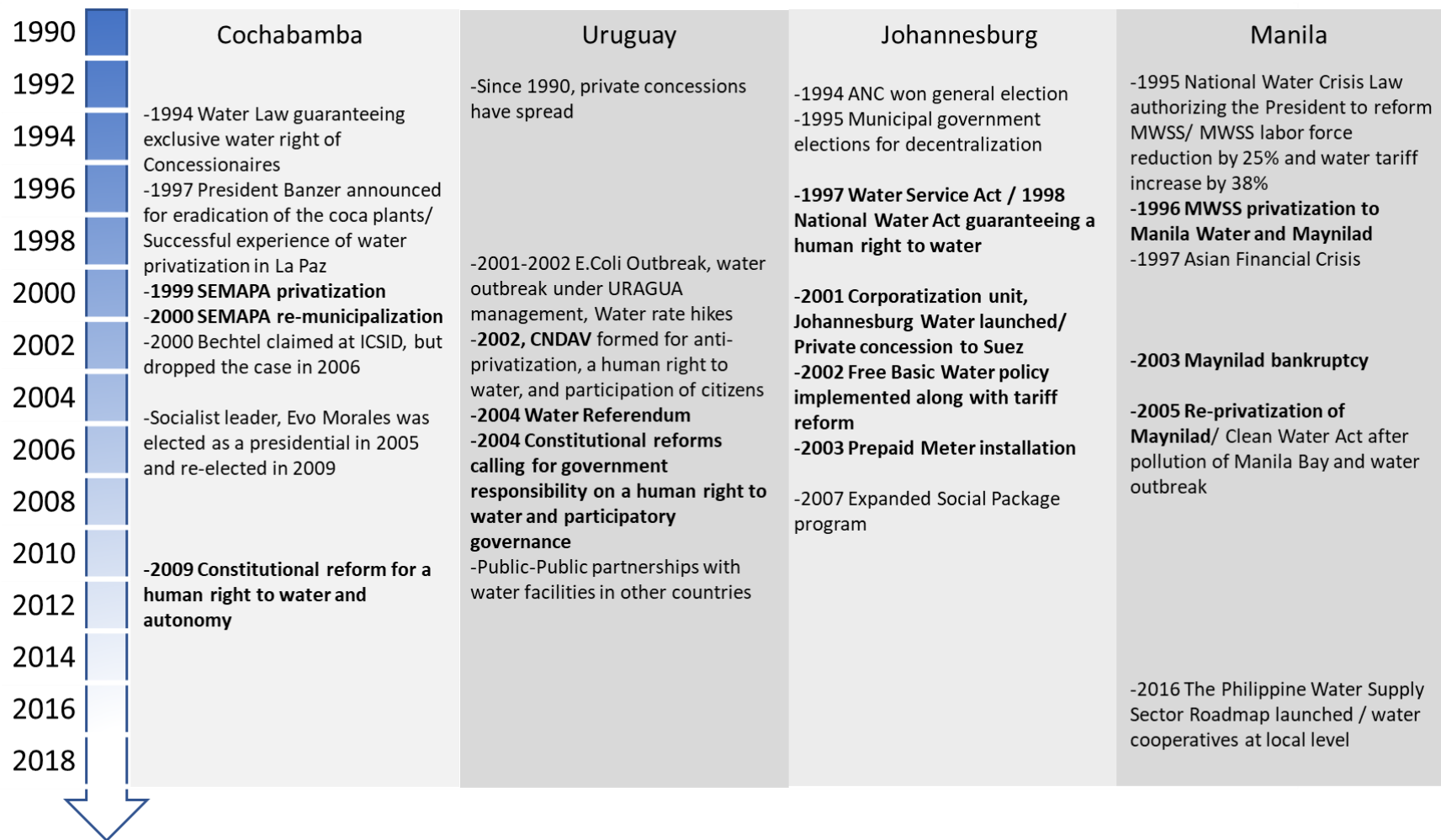


Figure 16. Policy learning across countries

Source: own analysis

Uruguay's government, for example, after learning about the dispute of Bechtel against the Bolivian government, implemented the transitory provision in their constitution which would help them to avoid potential lawsuit from private concessionaires. However, at the worldwide scale, policy learning across multiple countries seems to occur erratically. While the OSE in Uruguay has served as a leader of Public-Public Partnerships among water entities in Latin America that aims to foster better public provision through policy learning, the Philippine government has pursued private provision of the water sector and re-privatized Maynilad even after its bankruptcy in 2001. This proves that many of the fundamental elements of policy learning remain conceptually unclear (Jenkins-Smith et al., 1994) and, as a result, the entire phenomenon of policy learning across countries remains difficult to operationalize.

One potential explanation for such an erratic learning across countries can be explained by the level of human interaction and trusts among key decision makers. Marsden et al., for example, studies how cities approach policy learning by analyzing multiple cities and their transportation policies in Northern Europe and North America. They report that while a lot of information on policy change and implementation available through the internet, such information is not seen to be reliable source to key decision makers who are dominated the process of initiating policy transfer (Marsden et al., 2011). The study finds that key decision makers rather rely on their trusted networks of peers for lessons as they can access the real implementation story and the unwritten lessons. Marsden et al., concludes that human interaction in a trustable network is the most important source for policy transfer across cities (Marsden et al., 2011). This may be a clue to the question why Uruguay government has stopped private concessions, but not Manila government, given that both observed extreme conflicts of the Cochabamba Water War.

The increasing trend of private sector participation in water sector since 1990 stopped in 2007 and the number of private sector participation dropped significantly in 2010, as shown in Figure 16. The relationship of the decreasing number of private sector participation and policy learning process is yet unclear. However, powerful coalitions with the social belief discerned from this study and their efforts to build international solidarity against multinational private sectors and pro-market policies of international donors have inevitably influenced on the decision making toward private sector participation.

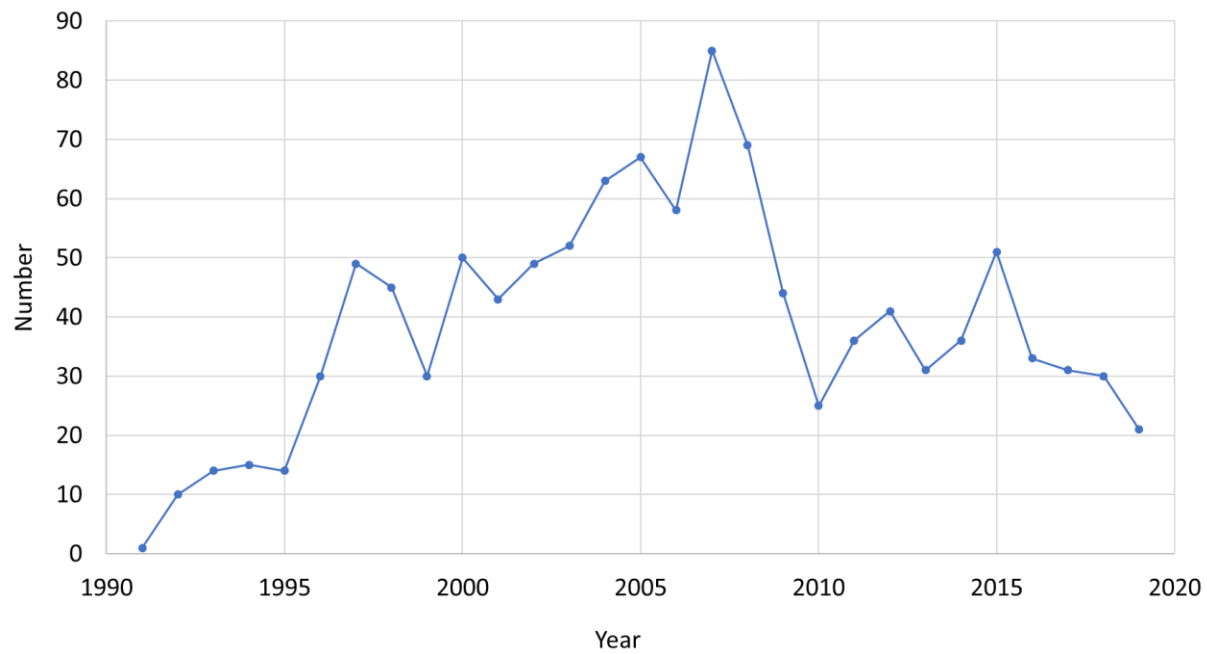


Figure 17. Number of private sector participations in water sector

Source: own analysis. Data from World Bank

4.5 INTERNAL AND EXTERNAL EVENTS TO INFLUENCE ON THE STABILITY OF WATER POLICY SUBSYSTEM

As shown in Figure 16, several internal events occur in four water policy subsystems with respect to water quality, maintenance, and water rates. Some of the events became a “shock” and resulted in water policy change to public provision while other events were not impactful enough to lead to policy change. For instance, a series of water main breaks, E. Coli outbreaks, and water rate hikes in Maldonado, Uruguay, stimulated the formation of CNDAV and the private concession was eventually canceled. The water rate hike caused by the Misicuni project in Cochabamba was the one of main reasons for the formation of Coordinadora which contributed to the re-municipalization of SEMAPA. On the other hand, the events of E. Coli outbreak, bailout of Maynilad, pollution of Manila Bay, and current water shortage in Philippines have not been able to justify re-municipalization of the MWSS in Philippines yet.

External events such as the winning of the political parties in election—for example, the Movement for Socialism in Bolivia, the Broad Front in Uruguay, and the African National Congress in South Africa—made a big impact on water policy subsystem. The winning political parties in all the three cases have implemented a human right to water and participatory approaches in water policy by amending their constitutions and related legislation, as well as by creating a civic space for the participation of multiple stakeholders. Their core beliefs toward public provision are implemented through democratic processes such as referendum and national election as opposed to the top-down approach to water privatization. Such national political context surrounding the water policy subsystem designates stronger consensus toward public provision of resource management. Therefore, the decision of public provision in water management under the

amended constitutions is likely irreversible in these three countries. The private concession is still allowed under public provision in Bolivia and South Africa but remains contentious in Uruguay.

5. ADVANTAGES AND LIMITS OF THE ADVOCACY COALITION FRAMEWORK AS A THEORETICAL FRAMEWORK FOR THE STUDY OF WATER POLICY IN THE GLOBAL SOUTH

This study shows that the ACF, as one of the most well-developed policy process frameworks, is useful to understand water policy processes of the four case studies. In essence, the ACF provides both a framework which bounds inquiry and focuses on certain variables (e.g., belief, coalition, events, etc.), as well as a set of theories which specify relationships among identified variables. Therefore, the ACF helps this study to construct analyses of water policy processes involving substantial belief conflicts among participants, important technical disputes, and the multiple actors who appeared in the context analysis of this study. This confirms that the ACF is applicable in analyzing and understanding water policy processes in the Global South.

However, this study finds it difficult to proceed with three points that appeared in the case studies within the ACF: 1) policy diffusion which occurs by international donors' incentives on privatization, 2) governments as a bounded actor opposed to a rational actor, and 3) the mechanism of collective decision-making in South Africa. First, the ACF does not clearly distinguish the difference between policy learning and policy diffusion. According to Meseguer, policy learning is voluntary whereas policy diffusion is somewhat coercive and pushed by incentives from other powerful actors (Meseguer, 2005). Though there is a notable degree of overlap between policy learning and policy diffusion, and the presence of horizontal diffusion and emulation makes any attempts to empirically test the difference more complicated, as the distinction between two would provide a clearer idea how the water policy, especially the decision to water privatization, was formulated under the pressure of international donors. A more analytical lens to proceed the term

of 'policy learning' would be beneficial in the ACF. Secondly, the ACF is limited in that it does not fully explain if the government is a rational or a bounded actor. If a government is a rational actor, they have full analytical capabilities, scan all available information regardless of its origins and values represented by different coalitions, and interpret all information in the same manner. Then they would be able to draw the same conclusions about the relative merits of different policies and marginalizing prior beliefs about policies in the light of mounting evidence, positive or negative. On the other hand, if a government is a bounded actor, they search only for relevant information which is available in their hands or geographically, culturally, and historically close to them. In this study, the Philippines congress passed the Water Crisis Act and the BOT Act and authorized President Ramos to make a quick decision on the privatization of the MWSS. The decision of the MWSS privatization was not the outcome of coalitions' competition as assumed in the ACF, indicating that some policies are made by powerful key actors in government. The policy decision by any political elite like a president, often happens especially in developing countries where a corporatist system is more dominant rather than a pluralist system. If the competition of coalition is not the causal explanation to certain policy process, it would be helpful to more deeply analyze the nature of key actors in governments and see whether they make the decision in a rational way or bounded way and how the way they make decisions influence the responses of coalitions formed afterward. Lastly, the ACF is limited in that it does not fully explain the mechanism of collaborative process, which is an increasing trend in water management policy. The term of policy-learning defined in the ACF shows that each coalition learns and changes their beliefs with new information and experience, but it needs to address how stakeholders work together to reconcile their beliefs in a collaborative process and in what conditions, as well as detail how policy outputs and consensus are produced in a collaborative process.

6. CONTRIBUTION OF THIS STUDY TO LITERATURE

The contributions of this study to the literature are two-fold. First, this study provides a new approach of network analysis to water policy field as a lens that identifies emerging actors, their policy core beliefs, and coalitions in water policy subsystem. The identification of multiple actors and their policy core beliefs under network analysis constitutes a contribution to literature and future research development, since it develops a greater understanding of the perspectives, interests, and main concerns of the various actors co-existing in water policy subsystem. By tracing network structure as a proxy for the relationship and influence in decision-making, the presence and absence of networks around the government and key actors indicate the powerful coalitions as well as potential opportunities for collaboration and more participatory approaches needed in water policy making.

Second, this study, by applying timeline on Advocacy Coalition Framework, adds more explanatory power to the framework. Advocacy Coalition Framework captures a wide range of variables and they are typically presented in a static way as shown in Figure 2. This way is difficult to explain causal relationships among the variables under a complex policymaking environment. This study suggests an improved way of presenting variables which records and follows the timeline of main policy change, external events, emerging coalitions, and outcomes, making it easier to understand the dynamic relationship of the variables.

In sum, this research generates a part of the much-needed data to facilitate public discussion and decision-making on national water policy in the Global South. Currently, compiled data is too limited to indicate how stakeholders' core beliefs have been shaped and polarized, and how civil society participation effectively influence water policy making. The increasing political

leverage of civil society discerned from this study would be useful for offering opportunity for politicians and governments to build a civic space for participation, for designing subsidies and tariffs for the needy, and for understanding ideological debates over privatization and re-municipalization. In addition, increasing calls for a human right to water and participatory governance and government's responses to the calls observed in this study disrupts the historical public-private continuum, providing new governance alternatives to overcome the chronic challenges in water sector that neither public nor private sector could have untangled.

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