Sustainable water management in the textile industry – barriers and opportunities:

The case of Swedish retail brand policy on water use in the context of Bangladesh, and the prospects of increased efficiency through dialogue

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Contents
1. Introduction .................................................................................................................. 1
  1.1 Aim ............................................................................................................................ 2
  1.2 Research questions .................................................................................................... 2
  1.3 Previous research on water governance in Bangladesh .............................................. 3
  1.4 Delimitations and limitations ...................................................................................... 5
  1.5 Disposition .................................................................................................................. 6
2. Background to water availability and governance in Bangladesh ..................................... 7
  2.1 Water resource availability ........................................................................................ 7
  2.2 Water governance in Bangladesh ............................................................................. 8
  2.2.2. Private sector governance .................................................................................. 9
3. Conceptual framework ..................................................................................................... 11
  3.1 Framework for identifying barriers to good water governance ................................ 11
  3.2 Institutional theory: formation and change ............................................................... 13
  3.3 Stakeholder engagement theory: governance through dialogue ............................... 16
4. Method ............................................................................................................................ 17
  4.1 Research design .......................................................................................................... 17
  4.2 Data collection ........................................................................................................... 18
  4.2.1 Sampling of interviewees ....................................................................................... 19
  4.3 Data analysis .............................................................................................................. 22
  4.4 Additional data collection and analysis ...................................................................... 22
  4.5 The role of the researcher ......................................................................................... 23
5. Barriers to good water governance .................................................................................. 23
  5.1 Barrier to agreement regarding the water issue .......................................................... 23
  5.2 Barriers in terms of knowledge, technology and finance ............................................ 27
  5.3 Social and political barriers ....................................................................................... 29
  5.4 Summary of barriers to good water governance ....................................................... 31
6. Opportunities to improved water management through dialogue ..................................... 33
  6.1 Reaching agreement through dialogue ...................................................................... 33
  6.2 Overcoming knowledge and technology barriers through dialogue ......................... 34
  6.2 Overcoming social and political barriers through dialogue ....................................... 35
  6.3 Summary of the prospects to improving water management through dialogue .......... 37
7. Discussion ......................................................................................................................... 38
8. Conclusion ......................................................................................................................... 44
9. References ......................................................................................................................... 46
Appendix 1 ............................................................................................................................ 50
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Abstract
Although Bangladesh is considered to be a water rich country the groundwater levels are decreasing at a steady rate. The pressure on water resources is to a large extent driven by the wet processing of textiles in the country, and this thesis will therefore focus on the issue of water governance in the textile industry. This thesis will argue that the issue is made complex due to the variety of stakeholders from different cultural backgrounds with vested interests in how the water resources are being managed. Based on interviewees from two Swedish retail brands, the Bangladeshi government, suppliers and organization active in the country, the thesis aims at identifying barriers towards increasing sustainable water management practices in the country. The diversity of cultural background will be analyzed through the lens of institutional theory in order to consider the differences in governance strategies and how they might relate to the barriers. The thesis will also present the prospect of an inclusive stakeholder dialogue platform as a means of overcoming barriers and institutional differences in terms of water governance strategies. Building on the findings the thesis concludes that there are several barriers in terms of agreement, knowledge, and social and political structures. Furthermore, it is possible to conclude that the stakeholders approach these barriers differently depending on their cultural background. Lastly, the stakeholder dialogue is considered to have the capacity to create a much needed space for stakeholder collaboration in order to overcome these barriers.

Keywords: Water governance, textile industry, institutional theory, stakeholder dialogue, Bangladesh
1. Introduction
In today’s society it has become widely known that humanity is facing challenging times ahead as the natural resources of this planet are being depleted at a much too high rate. Population growth, unsustainable consumption and production patterns across the globe are major drivers in the depletion process, and a change in behavior is of dire need if the planet is to have any chance to adapt to the new circumstances in its surroundings. It is this over exploitation of our resources which poses as a major threat to the sustainability of our planet (Rockström et. al., 2009). Furthermore, water, which is one of the planet’s most important resources as all life depends on it, is also one of the resources suffering largely from the over exploitation by humans. This pressure on water resource is also most notable in the developing countries of the world where population growth and economic development are the main concerns of the society. Moreover, the economic development of these countries is often due to a rapid expansion of industrialization, a sector that to a large extent is dependent on vast resources of water in the production processes. (Jones, 2010). Considering this trend it becomes evident that there is a need for more efficient water governance practices in these countries, and for this reason the present study will use the case of the textile industry in Bangladesh as an example of why and how the water governance issue must move forward. Bangladesh is today one of the biggest textile producers in the world, and its popularity amongst foreign brands to source from is due to the fact that production and labor costs are low. The industry is the number one driver of the economic development of the country, and the export of textiles from Bangladesh is expected to triple by the year 2020. (PaCT a). Nevertheless, the wet processing of the textiles contributes to a decrease in groundwater levels by 1 – 2 meters every year, an issue that might be difficult to perceive as the country is also seen as water rich in terms of large river deltas and monsoon periods. Furthermore, insufficient effluent treatment before discharge is polluting the surface waters all around the factories, rendering it unusable for any purpose. (PaCT b).

In the light of the complex relationship between the economic development of the country and preserving water resources it becomes apparent that there is a need for improvements in the way water is being governed in the textile industry by the different stakeholders. However, as will be discussed in this thesis, the governance structure of a society depends largely on cultural background of the stakeholders adhering to the issue, and the socio-political situation of the society at large. In this way the manner in which good water governance is perceived varies between societies (UNDP Water Governance Facility, 2015a). In the case of managing water resources in the textile industry in Bangladesh the relationship and differences in governance strategies between the concerned stakeholder increases the complexity as it is not only stakeholders adherent to the cultural background of the Bangladeshi society that are involved. The majority of foreign brands that are sourcing from the country come from a western perspective of good governance and they are thereby bound by those perspectives of efficient water use, but also by the consumer pressure from their home countries to ensure sustainable production of the product sold in the home market (Andrews, 2008). Furthermore, it is important to take into consideration that the challenges facing a developing country in terms of implementing efficient governance are by no means the same as those in a developed country.
where the institutional capacity of governing entities is of a different character (Andrews, 2008).

Nevertheless, efforts are being made towards increasing the understanding between the stakeholders concerned and it has been argued that the most efficient way to do so is through an inclusive stakeholder dialogue (Roberts, 2015). Such a dialogue could have the potential of overcoming the barriers that might arise when combining governance strategies from different contextual backgrounds and also to disseminate the actual need for governance reforms to ensure the longevity of the textile industry in the country without depleting available water resources. These aspects will be discussed in the course of this thesis, as barriers to water management will be mapped out along with a solution based approach in terms of stakeholder dialogues.

1.1 Aim
In regards to the issue of water governance in Bangladesh the aim of this thesis is to identify barriers to the development of a more sustainable use of water in the textile industry. Furthermore, the thesis also aims at considering the different cultural backgrounds of the stakeholders that are adherent to the textile industry and how this leads to differences in governance strategies. For this reason two Swedish retail brands will be included to represent the perspectives of western governance practices and will be put in comparison to the perspectives of the Bangladeshi stakeholders. Due to the difference in cultural background between the Swedish and Bangladeshi perspective the empirical material will be analyzed by applying the framework of institutional theory. Such an approach will offer a perspective of the ways in which the management capacity differ amongst the stakeholders. The thesis also aims at identifying the potential for overcoming the barriers acknowledged in the study through the implementation of an inclusive stakeholder dialogue for the industry. This platform is considered to have the potential of increasing policy coherency and coordinate action across sectors and between the stakeholders regardless of social background, and in such a way increase the sustainability of the water issue.

1.2 Research questions
In order to fulfill the aim the thesis will ask the following questions:

- **Which barriers towards more sustainable water management in the wet processing of textiles can be identified in the context of Bangladesh?**

- **What impact do the differences in water management practices between the Bangladeshi stakeholders and the Swedish retail brands have on these barriers?**

- **What is the prospect of increased sustainability in water management practices in Bangladesh through an inclusive stakeholder dialogue?**

The first two questions are derived from the initial part of the aim regarding the relationship and institutional differences between the Bangladeshi stakeholders and the Swedish retail brands in terms of water management practices. In order to answer these questions it will be necessary to find out what drives the stakeholder to engage in water management practices at
the different levels, and why it might be possible to detect differences in governance capacity between the sectors. The third question is connected to the latter part of the aim and will identify what the potential benefits are of increased collaboration between the sectors in terms of sustainable water management.

1.3 Previous research on water governance in Bangladesh

As can be seen in the introductory part of this chapter it becomes clear that the issue of water management is complex. For instance, Chowdhury (2010) explains that there is a growing demand for water resources in Bangladesh, which leads to an increase in conflict between alternative uses. The demand is growing for both agricultural purposes as well as for domestic use, due to population growth and urbanization, and in the industrial sector, especially with the expansion of the textile sector. It is with respect to this that more attention is now being given to the governance strategies of the water resources of the country. In an article by Gain and Schwab (2012) they argue that water governance can be describes as “the range of political, social, economic, and administrative systems that are in place to regulate development and management of water resources and provision of water services at different levels of society” (Gain and Schwab, 2012, p. 822). However, they also go on to argue that although this new perspective of governance, which includes a larger spectrum of the societal realm, not everyone is aware of the potential of this approach. This is something that is especially true in the case of Bangladesh which still lacks sufficient capacity to ensure governance practices to be efficient. To further develop their theories regarding the lack of effective water governance capacities in the country the authors present what is considered to be the most important aspects of good governance, which includes accountability, transparency, participatory processes and decentralized decision making. In Bangladesh it can be argued that the political structures, which are characterized by high levels of hierarchy and power centralization, the coherence between legislations formulated in formal institutions, such as government, are not well reflected at the informal levels in terms of implementation and compliance. In other words, even in the cases where policies regarding water governance exits at the government level these policies are often absent in practice (Gain and Schwab, 2012).

Unarguably, the constraint the public sphere is facing in regards to efficiently manage water resources is problematic considering the increasing water stress of the country. This is a situation which is further exacerbated by the fact that many of the older factories in the textile industry, for example, lack equipment for efficient water use and wastewater treatment. Although there is new focus on environmental management practices internationally, institutional inertia both in political terms as well as societal in Bangladesh renders the situation difficult to change, much of which can be seen as a result of lack of knowledge and awareness of the water situation and the impact of the industry amongst the Bangladeshi stakeholders (Hoque and Clarke, 2013). Nevertheless, there is a vast presence of international corporations in the textile industry of the country, and they thereby also have vested interests in the issue of water management as they wish to continue sourcing from the country in the long-term. The literature regarding why corporations engage in what is called socially responsible actions is ample, and the perspectives of why have developed somewhat over time. Peter. F Drucker (1984) for instance, a writer and professor in the area of business management, was one of the first to discuss the ethical behavior of businesses. However, his work focused primarily on the
external actions taken by the corporation which did not affect the business conduct directly. In recent years however, the perspective of the corporation’s role in the sustainable development of societies in which they operate has shifted into regarding the possibility of ensuring the internal business conduct more sustainable. This is thought of as being the result of the realization that sustainable business conducts have the potential of generating higher profit rates and that costs decrease if the sustainability concept is incorporated into the business model (Brammer et al., 2012).

Although there are significant benefits of a multi-stakeholder involvement in the policy making process it also adds another dimension to the complexity of the issue since foreign companies most like come from different institutional backgrounds and thereby represent another set of values than those currently existing in Bangladesh. In relation to this Brammer et al. (2012) made a study focusing on social structures in a society and how it influences the institutional framework on which these structures build. When stakeholder from one institutional context then engage in policy making activities and shares their values in another context, for example in a developing country such as Bangladesh, the corporation have the potential of impacting the institutional setting in the new context. This perspective if further highlighted in the work of Matten (2006) where he argues that companies look for ways of doing business that are consistent with society’s fundamental moral values. In the case of the Swedish retail brands represented in this study, their moral values stem from the Swedish society and the consumer demands existing there. In other words, as environmental sustainability has gained prominence amongst Swedish consumers’ demands in a product, the brands on the Swedish market sees environmental responsibility as a means of being rewarded extra satisfied consumers and thereby gain in profitability.

As has been presented previously in this chapter the focus of the thesis is two folded where it on the one side will discuss the challenges related to governing water issues in Bangladesh and on the other will present the prospects of improving the situation through a platform for stakeholder dialogues. These dialogues can be seen as forming collaborative networks amongst the stakeholders in the textile industry, and are today seen as the most productive and efficient way to address many complex and controversial policy questions. As a result of these dialogues becoming more systematic than before this form of collaboration is beginning to supplement, if not even substitute for, the more traditional forms of governing. However, depending on the already existing institutional setting of specific contexts, societies are more or less willing to adopt this form of governing (Connick and Innes, 2003). In the case of water governance in Bangladesh this difficulty can be seen as arising due to the power distribution in the public sector as well as towards other sectors. The institutional settings of the country are characterized by distrust and collaboration between government and non-government might therefore not always be possible at the first try. Collaboration between sectors and stakeholders requires trust and social capital in order to be efficient, but when power sharing between stakeholders is possible to achieve the benefits of the approach offers a more holistic solution to the problem at hand (Grover and Krantzberg, 2013; Ansell and Gash, 2007).

With this presentation of previous research in mind, this thesis aims at contributing to the literature by further examining the possibility of overcoming a specific set of identified barriers
to efficient water governance in Bangladesh through the approach of stakeholder dialogue. The contribution will further consist of the perspective of institutional differences between governing instances and the effects of power sharing amongst these stakeholders on the water management in the textile industry.

1.4 Delimitations and limitations
Due to the time frame and scope of the thesis several delimitations had to be made before conducting the research. Although there are several water intense sectors in a society this thesis will focus on the textile industry due to its high impact both on the economic development in Bangladesh as well as on the environmental degradation. In relation to this the thesis will only look at the wet processing of textiles as it is the most water intense part of the production process. A more extensive study could favorably have included more steps in the production chain. Secondly, the mentioning of suppliers will in this study only regard the first tier of producers. This is due to the fact that further steps in the supply chain are very difficult to trace, and few of the informants know enough about these entities to pronounce any perceptions regarding their work. In general this is an aspect that needs further research as it is difficult to ensure sustainable resource management unless all tiers follow the same practice. However, this study will focus on the first tier suppliers as they are directly engaged with the other groups of stakeholders; namely brands, governments, and organizations. The choice has also been made to include the perspective of Swedish retail brands. This choice has been made partly because of the researcher’s background and interest, but also because the brands included have a pronounced ambition of decreasing the environmental impact from the business conduct. Furthermore, by including the perspectives of the Swedish brands it gives an example of what the policies looks like when formulated by a stakeholder from a different cultural background than that of Bangladesh. Although it is possible to discuss the applicability of comparing the Swedish corporate perspective with the perspective of the Bangladeshi national stakeholders, seeing as the practices in which policy is formulated and implemented varies between the entities, it is not considered as a problem for this study. Instead, the cultural differences between the stakeholders are to be considered as representing the values of respective national context. In such a way the Swedish brands can be seen as reflecting the values and norms existing in the Swedish society, and in the same way the Bangladeshi stakeholders will reflect the underlying cultural and societal norms in the Bangladeshi context. It is therefore only the overarching values that the stakeholders represent that are to be considered and not the characteristic of the stakeholder itself.

Furthermore, although the thesis is looking at production practices and possible improvements to machinery and management systems there will be no detailed technical description etc. Rather, the study aims at the overall perception from the informants on the efficiency of the governance approach, and not that of the actual processes. In other words, the frameworks and policies discussed in this thesis will not include any technical aspects. Additionally, due to limitations in time the national legislation on water use will only be mentioned on a general basis and will not be presented per se. This is due to the fact that the access to official policy documents is limited and locating English versions proves even more difficult. Instead the thesis will rely on previous research and the relays from the informants in the study in order to map out the policy situation in the textile industry. Nevertheless, it would potentially give a more
thorough comparison between public and private sector challenges and opportunities to govern water in the country if space was to be given to a public policy presentation. However, as very few policies are implemented and enforced in the country it is considered to be of more importance to present initiatives made for the textile industry to govern water efficiently. Besides the delimitations made for the conduct of the thesis there were also underlying limitations which hindered the development of some aspects. For instance, during the data collection period the political situation in Bangladesh made mobility limited. Traveling within Dhaka was advised to be kept at minimum and travels outside of the city borders were strongly advised against. Although the initial aspiration was to visit factories and suppliers together with the brands it was made impossible due to the fact that the brands themselves postponed their visits. Only one factory was visited during the period spent in the country, but due to several incidents in the city in the weeks after no further efforts were made to leave the city during the weekday strikes. Further limitations to the study appeared as the availability of country representatives were difficult to find for other brands than the ones include in the study. Additionally, few of the Swedish retail brands that were contacted for participation at the initial stage of the study were at the time engaging in water related work in Bangladesh. Although this limitation of inclusion of stakeholders is prominent it is considered that the thesis manages to capture a nuanced picture of the situation without direct input from these stakeholders. This is especially due to the inclusion of the different organizations and consultants which also hold the interests of the suppliers in mind. However, for future studies on the topic it would be beneficial if inclusion of the aforementioned stakeholders could be made possible.

1.5 Disposition
The disposition of the thesis will be developed as follows:

Chapter 2 will contextualize the case of textile production in Bangladesh by giving a background to the water situation and what the governance capacity of the stakeholders included in this study looks like. Chapter 3 will present the conceptual framework of the study, which consists of institutional theory and stakeholder engagement theory. This will be followed by a description of the methodological approach in chapter 4, which entails information on the design of the study, data collection, analysis and sampling of interviewees. The empirical data will be presented in chapter 5 and 6, where the former chapter will show the perceptions amongst the interviewees regarding existing barriers to sustainable water management. Chapter 6 in turn will show the perceptions of the prospect of overcoming these barriers through the implementation of an inclusive stakeholder dialogue platform. In chapter 7 these findings will be discussed in relation to each other and the conceptual framework from chapter 3.
2. Background to water availability and governance in Bangladesh

In this chapter the thesis will present briefly what the current water situation in Bangladesh looks like and what the capacity within the country to govern these resources sustainably looks like. Furthermore, the chapter will present the importance of efficient water governance for the long-term sustainability of textile production in the country and how it relates to the political structure of Bangladesh. Moreover, the chapter will also present the manner in which the retail brands included in this study relate to the water governance issue and what their policies look like. The efforts made by the foreign brands in the water sector in Bangladesh are also represented in programs developed to improve the management of water, and therefore this chapter will present one such program that has gained prominence in the textile sector. This way it will be depicted what the different approaches to governance is between the different actors, which later on in the thesis will be used to analyze how these differences could impact on the development of water governance overall in the country.

2.1 Water resource availability

Bangladesh is a country located in South Asia, and even though it is a relatively small country it is one of the world’s most densely populated countries. Furthermore, the majority of the country has access to one of the many rivers that flow downstream into the country and creates large delta systems, where both the Ganges and the Brahmaputra are included. Due to its geographical location the climate in Bangladesh is tropical with monsoons and large seasonality in precipitation (Nationalencyklopedin, 2015). However, although the water situation in the country is seemingly stable the actual situation is of a different character. Due to the fact that Bangladesh is a popular country to source textiles from the water stress in the country is steadily getting worse with a rapid decrease in groundwater levels by 1 – 2 meters every year and polluted surface waters. There are different underlying factors to why the wet processing of textiles is so inefficient in Bangladesh, where some mills can use up to 300 liters per kilo produced fabric. This is six times more than the best practice example which is around 50 liters per kilo or less (PaCT b), and as the aim of this thesis has mentioned, the potential factors for this trend will be analyzed in the coming chapters.

Furthermore, Bangladesh gained independence from Pakistan in 1971 and formed its constitution on the basis of democratic parliamentarianism which consists of four principles: nationalism, socialism, democracy, and secularism. Nevertheless, all four principles are being contradicted in the social structure of the country, and the political sphere is often characterized by polarization and corruption. (Nationalencyklopedin, 2015). This has also led to a weak institutional capacity in Bangladesh with a lack of accountability and transparency in political decisions, low trust amongst the civil society towards public institutions and performance to deliver services and security (Khan, 2010). This can be put in contrast to democracies in the western part of the world, where the public sector is often characterized by strong institutional capacity and social trust (Andrews, 2008).
2.2 Water governance in Bangladesh

In regards to the water situation of the country and the fact that the textile industry along with other sectors in society consume vast amounts of water each year it is increasingly important to find a balanced way of ensuring continued growth of the country alongside sustainable water use. Nevertheless, the manner in which water is governed is not only dependent on the specific water institutions but also on the overall governance culture in the context where the water issue exists. In a country where some aspects of institutional capacity is absent, or where there is social or political instability, it is likely that these impediments will contribute to the prevention of sustainable water management reforms. (UNDP Water Governance Facility, 2015a). Additionally, the way societies govern water resources has profound impact on people’s livelihood opportunities and the sustainable development of the country. Water governance addresses several issues such as integrated water management approaches and the need to balance water use between socio-economic activities and ecosystems. It also includes the formulation, establishment and implementation of water policies, legislation and institutions, and clarifies the roles of different stakeholders such as government, civil society and the private sector. (UNDP Water Governance Facility, 2015b). In the case of water management in Bangladesh it is a continuous issue in the country due to a growing demand of resources both from a growing population and an expanding industrial sector. This conflict between alternative uses of the resources is further exacerbated when including the variable of climate change and a higher uncertainty of the seasonality of precipitation. (Chowdhury, 2010). The decline in the water table is also dependent on the fact that groundwater is the foremost source of freshwater for both domestic and industrial use in the country. The possibilities of decreasing the
dependence on groundwater and find other sources for water use, such as rainwater harvesting, has been discussed but are still to be realized. Furthermore, there are few policies by the government in Bangladesh that has gained sufficient footing in the industry to actually have a tangible effect on the water situation. The most extensive legislation towards the textile industry regards the use of effluent treatment plants for waste water, but in many cases the factories are able to find ways to disregard the legislation (Khan and Siddique, 2000). Additionally, the difficulty of enforcing government policy on water is further enhanced by the power structure in Bangladesh. This is due to the power structure between sectors and different actors in the country, which includes high level of hierarchy and results in the government as the first issuer of all kind of governing, including water resources. This can be put in contrast to how power is disseminated in a country such as Sweden where hierarchy is much less pronounced. Instead governance capacity is delegated to other levels of society as well, such as corporations, ensuring a more decentralized institutional setting (Daniel et al., 2012). This is also the first instance where there might be differences in how the stakeholders in the water management issue in Bangladesh perceive who has the mandate to govern and what is considered adequate management. It is, nevertheless, the government that has the ultimate responsibility to ensure that the population has access to public services such as clean water and thereby also the responsibility to formulate national policy and legislations on water use. However, these policies will only be effective if there are incentives to comply with them, such as for example sanction to non-compliance or market-based benefits. Nevertheless, in the case of Bangladesh where the public sector lacks accountability towards the stakeholders active in the country it is generally difficult to enforce the policies needed (Bigg and Ward, 2004). In this sense, it could also be argued that the need for private sector involvement in policy implementation and monitoring of behavior at the factory level increases.

Notably, however, the concept of governance is not synonym to government, hence private sector actors can also influence on the way in which water resources are governed in the industry (Graham et. al., 2003). For this reason, the following section will present two of the most influential channels of private sector governance in the textile industry in Bangladesh; the environmental policies formulated by the foreign brands active in the country, and a business driven water saving initiative for the industry. These initiatives by the private sector can be seen as an effort to overcome the lack of management coordination by the public sector.

2.2.2. Private sector governance
Although there are numerous foreign actors sourcing textile production from Bangladesh, for the case of this study two Swedish brands have been included: H&M and Lindex. Both brands profile their business conduct as sustainable and have developed Codes of Conducts, which include policies on environmental performance in the production processes of textiles at the factory level. Both brands also explicitly express that all suppliers must comply with all applicable laws of the country at hand. Nevertheless, the brand policies generally also extend further than national legislation, rendering brand policy more stringent in many aspects. (H&M Code of Conduct, 2010; Lindex Code of Conduct, 2015). Besides the policies in the Code of Conducts, the brands also have priority areas for improving the water management at the factory level. For instance, both brands are promoting participation in different projects in the country which will lead to process improvements and transition to more resource efficiency. This also
entails investments in cleaner production (CP) technology and management systems. (H&M Sustainability Report, 2014; Lindex Sustainability report, 2013). One such project that has gained much prominence in the water governance arena in Bangladesh has been initiated by the International Finance Corporation (IFC), which is a member of the World Bank group (PaCT c). The program is called the Bangladesh Water PaCT: Partnership for Cleaner Textiles, and is focused on creating coherency between the different stakeholders in the industry. The partnership includes wet processing factories and several international brands with large influence in the country, as well as NGO’s and public sector actors. The program started in 2013 and aims at a systemic and positive environmental change for the Bangladesh textile wet processing sector, and at the same time contribute to the sector’s long-term market competitiveness. The program involves the stakeholders in the program at different steps. Initially the brands together with the IFC nominate a set of sourcing factories to participate in cleaner production assessments. Once the assessments of the factories have been realized a set of recommendations of improvements are put forward to the factories. These recommendations take into consideration the capacity of the factories and either focuses on low- or no cost measurements for cleaner production changes. Factories with high level of capacity can also participate in ‘deep dives’ into cleaner production and water saving processes, which require more investments in technology than the first. (PaCT d). The program aims to introduce these Cleaner Production concepts to 500 factories, help 200 factories implement low- or no-cost Cleaner Production, and work with 100 factories to make in-depth improvements. The PaCT program also offers the factories consultancy services in order to strengthen the capacity of the factories to make the changes (PaCT e).

However, the PaCT program is not only engaging brands and suppliers in the CP process, but the program also offers a space for the public sector to participate in the development of the textile industry through their stakeholder outreach component. It is this component of the program which contributes to this thesis focus on the collective action by the stakeholders in order to improve the governance between the sectors. In other words, the PaCT program is also introducing a Textile Sustainability Platform which aims at creating a space where the different stakeholders can meet in a common dialogue on the water issue of the country. The perspective of stakeholder dialogues is also supported by the brands in this study, as they see it as a way forward in order to meet their interests of a long-term production relationship with Bangladesh (H&M Sustainability Report, 2014; Lindex Sustainability report, 2013). The sustainability platform has been initiated as a tool to ensure the development of the sector to move in the right direction and enable the stakeholders access to modern technologies and management systems, along with a shared understanding of the importance and efficiency of the new approach (PaCT f). The stakeholders that are included in the dialogue platform include brands, suppliers, governments and organizations with vested interests in the water issue, but there is also room for participation from financial institutes as well as academia. The platform itself is organized under formal conditions, where the different stakeholders are invited by the IFC to participate in discussions regarding the issue at hand.

Opening up the possibility of a stakeholder dialogue does not only mean that collective action can be taken in regards to a more sustainable use of water resources, but it also creates an
unprecedented approach to governance in Bangladesh. The following chapter will present more closely the diversities existing in the country regarding institutional structures which in turn will generate a tool to analyze the underlying difficulties in managing water resource and to what extent the stakeholder dialogue can be expected to improve the situation.

3. Conceptual framework

As have been presented in the previous chapter the concept of water governance in the textile industry in Bangladesh is multifaceted due to the diversity of stakeholders in the process and their different perception on the acuteness of the water issue. In order to analyze these different perceptions further on, this chapter will present the conceptual framework of the thesis, namely institutional theory. The logic of applying this approach lays in the assumption that cultural background and societal structure determines the way water is being governed. For the purpose of this study the differences in societal structures will be used to analyze the differences in institutional structures between the national actors in Bangladesh and the Swedish retail brands that are sourcing from the country. Furthermore, it is the different governance strategies that are considered as the institutions at hand and regards management strategies, policies and legislation, and general mindset in society towards management of water resources. The theory will further be used as a tool in analyzing the barriers towards sustainable water management identified by the informants in this study in regards to how institutional differences amongst the stakeholders might impact on these barriers. The conceptualization of the analytical framework will be done by introducing different approaches in the literature regarding the structure and formalizing of institutions depending on their origin, and how they may or may not change over time. This chapter will also present differences between various levels of institutions in society and how they may impede on each other. This is an important aspect to the thesis as these differences not only exist on the national level, but also between the two cultural contexts. The barriers to managing water efficiently will be identified from the perceptions of the interviewees included in the study, and the identification will be done by applying the classification framework developed by Stephen Trudgill (1990). Therefore this chapter will also include a presentation of said classification framework. Furthermore, as the thesis aims at looking at the possibilities to overcoming these institutional differences in the water governance issue by improving stakeholder collaboration through dialogue, the chapter will briefly present stakeholder engagement theory and the concept of stakeholder dialogue. This will be done in order to further analyze the findings in chapter six through a theoretical lens.

3.1 Framework for identifying barriers to good water governance

First of all it is necessary to present the framework by Trudgill (1990) which will be applied when identifying the barriers that exist towards governing water more sustainably in the textile industry in Bangladesh. These barriers are related to institutional differences amongst the stakeholders as different governance practices could lead to frictions between the institutions.

According to the framework it is possible to identify six categories for the barriers that might arise when trying to improve environmental problems in a situation where different
stakeholders are involved in the process. The first issue that needs to be determined is the existence of a problem. The definition of the problem can vary depending on the aims and goals inherent in each stakeholder’s agenda and it can even lead to disagreements on the existence of a problem or not. Furthermore, even if an agreement on the existence of a problem can be reached there can still be difficulties in finding consensus on the magnitude and severity of it. Reaching an agreement regarding the problem is the first barrier of Trudgill’s framework towards finding a solution to the environmental problem at hand. However, even if an agreement has been made there are several other barriers that can arise along the way. For example, is there enough knowledge regarding the problem and on how to solve it? Are there technological solutions available? Is there enough funding to solve the problem? What are the political and social conditions surrounding the problem? These barriers are of course not to be seen as constants, but rather as fluid entities that can interact with each other in different ways depending on the characteristics of the problem at hand. (Trudgill, 1990).

Below is a schematic overview of the barriers identified by Trudgill (1990) where it is possible to see the steps following the identification of a problem towards finding a solution to it. Of course, it is not necessary to detect barriers in all the stages, but it can often suffice that one of the steps creates an impediment towards reaching a solution, and it is at each stage possible to ask whether or not it proves to be a barrier.

| Problem | Agreement | Knowledge | Technology | Economic | Social | Political | Solution |

*Figure 2: Trudgill’s six barriers to better environment.*

Trudgill also offers a more detailed description of the different barriers and how they might hinder the stakeholders to reach a consensus on how to solve the problem. Firstly, in the case of agreement there is not only the difficulty in agreeing on the scope of the problem and how to achieve a solution that poses as a barrier; there is also the issue of hierarchies in goal settings. The hierarchy can exist in terms of personal, corporate, national, and global goals and desires which might interfere with each other. The disagreements can, for example, arise when limited personal goals and wider global goals impedes on one another. Thus, it is of importance in the first instance to prove the existence of the problem and to demonstrate that said problem is of significance. But even when evidence of a problem is presented to all stakeholders there is no guarantee that each party is willing to accept the situation. Even in the case that the evidence is acceptable there might be difficulties in problem denial from the stakeholders who possess the strongest individual beliefs or vested interests. When it comes to the knowledge level of the stakeholders involved it might pose as a barrier in the sense of understanding about the process and evidence concerning causes, effects and possible solutions to the problem. If the knowledge base is inappropriate or insufficient it might impede on the development of an effective management plan, or it might not be clear what the best way of tackling the problem is in the first place. Alternatively, the knowledge might be adequate but the communication to the people
who need it might be lacking. The knowledge aspect is also important to consider in relation to the context in which the knowledge is being disseminated, as societal structures determines how the knowledge will be received and used by the stakeholders. Besides knowledge, another barrier that might hinder a solution to the problem is technology. In many contexts there might be a complete lack of technological options, or there is a lack of knowledge on how to use them. In some contexts there may even be economic, social or political structures in the way of technological solutions. For example, in the economic/social/political barrier perspective all other barriers might have been solved, but if the agreed upon solutions are too expensive or are not socially or politically acceptable in the given context, then the solution becomes unachievable. In other words, it is the economic, social and political barriers that potentially prove to be the determining factors in tackling environmental problems. (Trudgill, 1990).

3.2 Institutional theory: formation and change

The following section will present a set of approaches within the framework of institutional theory on how the cultural background of a society shapes the institutions within it. Parallels will also be drawn from the perspective of water governance in the textile industry to the theoretical approaches. This will be done to later enable an analysis of the difference in institutional settings between the actors included in this study and in what way the differences can be seen as having an impact on the perceived barriers mentioned above.

Institutional theory is and has been widely used in the literature regarding how societies are structured and functioning, and the fact that there are differences between societies is also a reason to why there is not one unanimous characteristic for all institutions. Instead, according to the theory, institutions have been argued to reflect the values and behaviors of the individuals that exit in the society at hand. However, institutions are also in place in order to determine and regulate appropriate behavior of organizations and individuals in a society (Peters, 2005). Notably, as North (1990) points out, institutions determine how people act in their every-day life and thereby also how they interact with each other and comply with laws. Nonetheless, due to the cultural dependence institutions may not easily be translated from one society to another. In other words, the structure of institutions is argued to depend on the cultural background of the society in which it exists. (North, 1990).

Furthermore, the institutional concept can be divided between different levels of society, such as government and civil society, and the concept can take the form of either formal or informal institutions. The formal institutions include laws and regulations on acceptable behavior by actors in a society which, if disobeyed, can lead to sanctions. The latter category regards the informal ways members of a society interact with each other or with institutions themselves. Such informal rules include unwritten constraints or codes of behavior, or other norms that inhibits people to act in any other way than what is seen as acceptable in a society. Formal rules and policies are usually formulated in order to correct for behavior that is deemed undesirable in the informal institutions of the society. The relationship between formal and informal rules, however, can be complicated if there is a mismatch in how the different levels of the society view the reality in which they exist. (North, 1990). For example, in the case of water governance in Bangladesh the formal policies and rules formulated to steer the behavior of the industry might not be aligned with how the informal behavior is conducted. This means that the policies
and regulations formulated by either the government in Bangladesh or in the business conduct of the foreign brands (e.g. formal institutions) run the risk of not being accepted by the informal values and norms which exist in society. The actors working on the informal level might perceive such policies unnecessary or redundant. Moreover, formal institutions have the capacity of being formed instantly when needed, while informal rules tend to develop over time (North, 1990). Nevertheless, there is an intrinsic relationship between the formal and informal institutions within a society. As Fernando and Lawrence (2014, p. 168) phrase it: “All organizations are socially constructed and tend to conform to social norms and beliefs, and adhere to institutional rules and norms”. In other words, in the same way that formal institutions intend to influence the behavior of the people in the society, the informal institutions in terms of norms and beliefs also influence the formal institutions through a bottom-up approach.

Although the conceptual framework of institutional theory can be divided into different approaches and between different scientific disciplines, for the purpose of this thesis only approaches regarding the cultural aspect of institutions will be presented. Leading from this, three different approaches will be presented; namely isomorphism, normative institutionalism and historical institutionalism. Firstly, Fernando and Lawrence (2014) begin by defining the approach of isomorphism as a homogenizing process of institutions in a given context. In other words, the process of how institutions tend to develop similar characteristics within a specific setting. This homogenization process in turn is characterized by two components; competitive isomorphism and institutional isomorphism. The competitive factor is created due to external forces where the need for adopting least-cost, efficient structures becomes evident in order to compete with similar organizations or businesses. In the case of water governance in Bangladesh the competitive factor which causes homogenization can be seen as the presence of foreign brands that come from a different cultural context and thereby have different demands on how water resources should be managed. The national suppliers in Bangladesh could then be seen to change their water management practices in order to maintain competitive advantage against other suppliers. The institutional isomorphism of the homogenization process in turn relates to how institutions adopt to new norms according to either pressure from powerful stakeholders, such as the sourcing brands, or through changes in the informal norms in society which determine the expectations on how the industry conduct their business. In this study such changes in societal values could be seen as having emerged in the home countries of the sourcing brands, leading to increased pressure from said brands on the producers in Bangladesh.

To further develop the concept of homogenization of institutions it is possible to include Peters’ (2000) definition of normative institutionalism. He points to the difference between normative institutions and consequential ones where the normative approach acquires people to follow the logic of appropriateness rather than to maximize their utility. In this sense the competitive isomorphism mentioned above could be seen as an attempt by the actors to maximize the benefits of their business by adjusting to market demands, while the institutional isomorphism relates to the normative influence on institutions. In other words, the normative influence on institutions is caused by changes in the values consumers or societies ascribe to the sustainability of the production process of textiles. The change in consumer demand can also be argued to be present in the manner in which the brands view the need to manage water
resources, but brands could also be driven by other underlying norms from their home nations and thereby put normative pressure on the suppliers.

Nevertheless, within the theoretical framework institutions are seen as being slow to change and characterized by inertia and path dependency. This is moreover a feature which is presented as a result of the contextual influences on the institutions of a society, and it is an aspect of the concept that Peters (2000) identifies as historical institutionalism. By applying this approach the policies and structure of choices made at the creation of the institution will have a persistent influence over the remainder of its existence. In other words, historical institutionalism and path dependency can be used to analyze why institutions do not change easily. (Peters, 2000). In the case of water management, the path dependency aspect could be seen in terms of why the textile production is still resource intense in Bangladesh when there are best practice examples in other parts of the world. Instead, institutions can be seen as to reflect the particular power relations at a specific point in time, but once in place the institution and the power relations within it shape the identities of social actors in ways that are durable over long periods of time (Brammer et.al., 2012). Furthermore, the cultural influence on institutions cannot be seen as solely a generational flick, but rather it should be seen as an intergenerational process which also contributes to the way institutions develop over time (North, 2005). Nevertheless, although institutions are viewed as static in their development patterns the societies in which they exist are not. Therefore, institutional change needs to be viewed through the perspective of an interaction between the institutions and the individuals. Furthermore, the static structure can vary depending on the institution and therefore also the boundaries to how difficult change will be to achieve. (Peters, 2000). Additionally, as cultural background can be argued for in in the theory to be a determining factor for the way society processes information and is perceptive to changing circumstances in the environment, the incremental change of institutions is often connected to informal norms. The formal institutions are subject to change due to political decisions and can be created at a specific point, and are thereby most commonly the informal institutions that are a source to path dependency (North, 1990). In this sense, it can be considered that even though new policy on water management can be formulated, the informal norms amongst the suppliers on the value of saving water will in the end determine the development of water management.

Path dependency in turn can be defined in different ways depending on which meaning is ascribed to it. In some cases it is defined as an incremental change in one direction over time (North, 1990). In a more narrow perspective on the other hand, path dependency can also be understood as a “lock-in effect” where change become unlikely to happen at all. Lock-in situations occur, for example, when neither of the stakeholders in an institution have any incentive to deviate from the existing strategies or behavior (Rixen and Viola, 2015). To further elaborate on the concept of path dependency, Rixen and Viola (2015) sees the process of self-reinforcement as an underlying factor to path dependency. “The ‘reinforcement’ of the process explains path dependency as the more a choice is made or an action is taken, the greater the benefit” (Rixen and Viola, 2015, p. 305). The ‘self’ in turn aims at a situation where there is a cause-effect circuit or a feedback loop. For a process that is self-reinforcing it means that the selection of choices made in the beginning of the process determine the structure of the
institution in a way that will allow for payoffs to go along with the early choices even though they may not be efficient. (Rixen and Viola, 2015). An example of ‘self-reinforcing’ institutions could be taken from the water management at the factory level. The initial choice of using vast amounts of water in the production process has resulted in cheap production and more brands sourcing from the country. As long as the brands continue sourcing the suppliers will have little incentive to make operational changes or invest in new technology, since the costs run the risk of exceeding the benefits. Furthermore, few factories will be willing to make changes unless others are doing the same, or if there is a strong commitment by the sourcing brands.

Institutional theory assumes that institutions change, or stay in status quo, due to various influences in the cultural context of a society. However it can also be viewed in a way that suggests that institutions change due to the perception of the different stakeholders that they could do better with an alteration to a contract or to the institutional framework in general. For formal institutions such changes are often seen as connected to economic gains or increased efficiency, but for informal norms and behavior the theory struggles to determine the underlying cause of change. As have been mentioned earlier, some formal rules are also seen to change in order to overrule undesirable informal norms that no longer serve the interest of the contract. Although the informal institutions might change more incrementally, the changes to formal structures will over time result in an adjustment of the informal institutions in line with the new policies or regulations. Nevertheless, in the space of time that exists before such an adjustment has taken place the theory clams that it might be possible to detect a tension between the two types of institutions. (North, 1990).

Having presented the theoretical approach to the ways in which institutions are formed and change over time it can be said that theory sees the cultural aspect as a prominent component on how institutions develop in a society. It is also this aspect which will be used to analyze how the differences in water governance strategies have developed over time between the Swedish retail brands and the Bangladeshi stakeholders in the textile industry. However, as it has also been argued to be a homogenization possibility of the institutions in a society, both on formal and informal levels, it can be argued that the coordination problem of policies and actions could be overcome if the collaboration between the different stakeholders increased. Such a dialogue could be viewed as a normative approach to institutional change, as it is in the process of learning and the capacity of the society to gain new knowledge, innovations, and undertake risks that determine the character of change (North, 1990). The following section will therefore present the theory of stakeholder engagement through inclusive dialogue as a manner to disseminate knowledge about processes and to increase understandings of different agendas amongst the stakeholders. In such a way the stakeholder engagement theory also offers an approach to how the barriers from section 3.1 could be overcome.

3.3 Stakeholder engagement theory: governance through dialogue

Due to the dependence of cultural background in the structure of institutions and manners of governance there is an apparent difficulty that arises when trying to combine policies in the international arena. Therefore there is a growing recognition of the importance of integrating a system of an inclusive stakeholder approach in governance strategies and policymaking. This is especially the case for public policymaking at the governmental level since the stakeholders
who are inherently affected by these policies are drivers of the issues and include different interest groups, private sector, and civil society to mention a few. Furthermore, one area where this multitude of stakeholders is frequent is in issues regarding the environment and resource management, and in the environmental policymaking diversity of interests is often as many as there are stakeholders. This diversity of interests is also why these kinds of issues have a high likelihood of becoming public disputes which is why stakeholder participation could enable a more efficient forum. When stakeholder can meet in a meaningful way it could also allow for more shared responsibility of the outcome of new policy and management practices, a vital approach when it concerns issues that are beyond the risk tolerance of a single organization or agency such as the environment. Stakeholders can then be seen as providing support and stability to the policymakers and in the process increase the legitimacy of the decisions. Nonetheless, all involved parties must be willing to share power and participate constructively. (Orr, 2013).

Constructive participation of stakeholders is most commonly thought of to occur in a situation of dialogue. This type of stakeholder dialogue can be seen as a process where a relationship between the different stakeholders is being built. However, the functionality of the dialogue also builds on the premise that the participants treat each other with equality, regardless of their hierarchical status outside of the dialogue platform. The functionality can, in other words, only be guaranteed as long as the dialogue is a process of mutual understandings and the stakeholders listen to each other empathically and share their different fundamental assumptions and worldviews. This is of course far from an easy process and it becomes increasingly difficult in situations where stakeholders come from different cultural backgrounds and societal levels. Furthermore, there is also the risk of stakeholders already having presumptions about the other participating actors which will affect their ability to listen with an equality perspective in mind. Another problem that might arise is when each group of stakeholder aims at framing the issue in a way that will promote their own interests in the most beneficial way. Stakeholder dialogue is not the only way of dealing with situations of discrepancy, but the benefits of a collaborative approach can be argued to make it the better of options since it enables a platform where the stakeholders can widen their understandings of the problem and take into account other stakeholders perspectives. (Roberts, 2015).

4. Method
In the following chapter the method used for designing the thesis and collecting and analyzing the data will be presented. This will be done by firstly presenting the research design of the study and the implications and alternatives that goes with it. Secondly a presentation of how the data collection was conducted and analyzed will take place, showing both the method used for interviews as well as for document analysis. The section regarding interviews will also disclose how the sampling of the interviewees took place.

4.1 Research design
The research design of this thesis will take a qualitative form since it aims at examining in detail the underlying institutional settings that exists and determines how water is being managed in
Bangladesh. A qualitative approach is a good tool to apply when the analysis of the material aims at identifying certain aspects of the larger content. For the case of this study the qualitative approach has been useful in the analysis of the primary data since it has been necessary to decompile the underlying meanings and arguments made by the interviewees. For this thesis the decompiling has been done through classifying the material from the interviews according to a predetermined framework (see chapter 3 for the classification system by Trudgill) (Esaiasson et. al., 2007). Furthermore, the qualitative research design of this study will take the form of a case study as the study object is water management in the wet processing of textiles in Bangladesh. The qualitative case study is considered an adequate approach when the research includes relatively few analysis units and when material conducted from each is detailed (Esaiasson et. al., 2007). The choice of focusing the case study on water management in Bangladesh was due to the fact that it can be seen as a representative case for a developing country where Swedish retail brands are represented and have an impact on the economic development of the country. Thereby it also becomes an interesting case to analyze in respect to the cultural differences that can be identifies between the stakeholders active in the textile industry. Although case studies have been accused for not being generalizable to other contexts (Esaiasson et al., 2007) this study can be considered to represent other cases where similar institutional settings amongst stakeholders can be found.

In order to understand the institutional settings identified in this study a theoretical framework has been chosen in order to analyze the findings in the empirical data. Unlike natural sciences, which research objects often are characterized by regular patterns and can be explained by applying universally acknowledged laws, the social sciences have no direct laws of occurrence. However, this does not mean that social life operates in a totally irrational manner, but rather that once behavior and ideas are studied carefully it is possible to detect fairly regulated patterns. The purpose of the social sciences is to make sense of these patterns by the application of a theoretical framework. (Berg, 2009). In this study the conceptual understanding comes from the application of institutional theory and will be used to identify different phenomena in the way that water is being managed in Bangladesh; namely how institutions are formed and why they might change, and how differences in governance strategies might impede on the development of future sustainable management practices. The theoretical approach will also allow the operationalization of the institutional concept and what is meant by it for the purpose of the study (Berg, 2009).

4.2 Data collection
The data collection of this study has been made from two primary sources; namely interviews and brand policy and framework documents. Since the major empirical material has been gathered through the interviews the following section will present how the interviews were conducted and the material analyzed, as well as how the sampling of interviewees was made.

Interviews are a good method to use when the experiences and perceptions of the people in a specific context is the main objective for the study. It is therefore a suitable method for the purpose of this thesis as it is the interviewees’ perceptions on the water management situation in Bangladesh that is of premier interest. In accordance with the research design the interviews were performed with a qualitative framework, allowing for a more nuanced picture of how the
stakeholders perceive the water issue in Bangladesh. (Kvale and Brinkmann, 2009). In other words, the interviews are used in order to identify the main barriers that exist in managing water resources for the textile industry in a sustainable way. For this purpose the interviews are also designed in a semi-structured way and interviews have been conducted with 14 stakeholders from different segments in the water management issue. In the qualitative interview situation it is possible to design the interview questions according to the overall structure of the study, whether the expectations of the answers have been previously formed or if the purpose of the interview is to explore the field of perceptions (Alvesson 2011). As this thesis aims to navigate amongst the perceptions and insights of the interviewees the design of the interview questions are semi-structured and open-ended to allow the informants to elaborate on the issues closest to their interest.

Before conducting the interviews an interview guide was formulated in order to make sure that all the themes were covered by each interviewee. As the interviews are semi-structured only the most important questions in relation to the aim of the study were formulated beforehand. These questions all related to the overarching themes: 1) Stakeholder engagement in water issues; 2) Policy coherency between government and brands; 3) Policy implementation challenges; 4) Contextual considerations and; 5) Prospect of a stakeholder dialogue platform. Nevertheless, as this thesis aims at finding the perceptions of each stakeholder more specific follow up questions were also made during the course of the interviews. (Esaiasson et al., 2007). One of the benefits of making semi-structured interviews based on themes is that the answers can be compared between the different interviewees (Berg, 2009). All interviews that are included in this study were conducted face-to-face, and although no time frame for the duration of the interviews sessions were made most of the interviews lasted between 45 minutes and 1 hour. In this manner it allowed for the interviewees to fully disclose their perception of the water situation without any time limit. The interviews were further recorded after receiving consent to do so. Moreover, the names of the interviewees have also been left out, not necessarily because the interviewee asked for it but rather since it is not relevant to the study. All interviews were conducted in English, except one which was held in Swedish. However, only the parts which were used in the results have been translated into English by the author. In Appendix 1 it is possible to find the interview guide with the theme questions. Notably, however, is that due to the diversity of the informants included in this study the more specific questions were reformulated or constructed for each of the interviewee groups in order to make the informants more comfortable with the process (Berg, 2009).

4.2.1 Sampling of interviewees
As this thesis is a qualitative study and the stakeholder chosen for interviews have been selected based on their role in the water management issue, the sampling is of a nonprobability character. In this sense the interviewees has been selected based on purposive sampling as they can be seen as to represent their group of stakeholders. (Berg, 2009). Furthermore, the interviews in this study can be seen as informant oriented and the choice of interviewees therefore build on a principle of intensity, which means that the stakeholders who have been included are expected to be traversed in the issue and that they collectively possess the information needed for the purpose of the study (Esaiasson et al., 2007).
Although there are more than one organization working actively with the water management issue in Bangladesh this study has chosen to include the example of the PaCT program, which was mentioned in the background chapter. Leading from this the purposive sampling method was initiated by an interview with one of the informants from Organization 1, which represents PaCT. This decision was made since the program has gained prominence in the country since it started in 2013 and it is recognized by the Bangladeshi stakeholders and the Swedish retail brands as legitimate. It is this legitimacy that allows the organization behind the program to engage stakeholders from different sectors. Two informants were interviewed from this organization during the course of data collection, and it was during the first interview with informant 1 that an orientation of the arena of water management stakeholders in the industry could be made due to the informant’s expertise. The interviewee also had a large contact network within the industry and with other organizations and therefore enabled the next step of sampling through the chain referral method. The initial purposive sampling also included both brands, H&M and Lindex, in this study since they together represent one large and one small brand that is active in the country. Nevertheless, in the initial stage of the sampling process the thesis aimed at including six Swedish retail brands for the empirical data. However, two of the brands declined to participate and another brand dropped out early in the process. A third brand did participate in interviews, but since they had no county representative in Bangladesh it was difficult to collect enough data from that specific stakeholder and the material was thus left out of the study. Although it would have been desirable to collect more empirical data on the work that Swedish brands do on the issue of water management in the country, the two brands that have been included are valuable to the study since they represent a broad spectrum of perceptions due to the difference in size, and therefore also influence on the water governance arena, in the textile industry in Bangladesh. Their different perspectives of the issue could therefore be seen as representing most Swedish brands sourcing from Bangladesh. Furthermore, purposive sampling was applied when reaching out to both Organization 3 and 4 since they both are organizations which are engaging in capacity building and awareness rising of management strategies and standards in the industry.

Once interviews with the purposely chosen stakeholders had taken place a next step of sampling was applied; namely snowball sampling. This method for sampling is also called chain referral sampling and it is in many cases the best option to locate interview subjects who can contribute with the characteristics necessary for the study. (Berg, 2009). In the case of this study the snowball sampling was done through asking the interviewees if they could refer to any other organization, governmental department, or supplier. This method resulted in the identification of the remaining stakeholders included in this study (see Table 1 above).

The snowball sampling resulted in interviews with several relevant stakeholders related to water management issue. For instance, another three interviewees were derived from the initial interview with Organization 1. This sample included informant 2 from Organization 1, and the informant from Organization 2, which both contributed to data collection on how they work with stakeholder dialogue platforms. The third interview derived from this initial snowball sample consisted of both Consultant 1 and 2, and they represent a consultancy entity that enabled the implementation of cleaner production practices at the factory level. Additionally,
the interview with Consultant 1 and 2 lead to the possibility to contact the Government representative. Through the contacts made with Organization 1 an interview was also conducted with the Textile Association representative which is the biggest association for the textile industry in the country. Lastly, snowball sampling was also applied in the interview with the Lindex to get in contact with both Consultant 3, which is a consultancy firm working towards capacity building in the industry, and with the supplier company.

The choice to build the empirical material on a majority of interviewees belonging to an organization, association or consultancy firm is due to the fact that they are expected to represent standpoints from both public and private sector as they have a mediating role in the water management issue. In other words, they are the stakeholder group in this study which is assumed to have the most comprehensive overview of the water management in the country.

Below is a schematic overview of the interviewees included in this study, which group of stakeholders they are expected to represent, as well as the position of the interviewee in the respective group.

**Table 1: Overview of interviewees and their respective position**

<table>
<thead>
<tr>
<th>Group of interviewees</th>
<th>Interviewee</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brands</strong></td>
<td>H&amp;M, informant 1</td>
<td>Relations Responsible</td>
</tr>
<tr>
<td></td>
<td>H&amp;M, informant 2</td>
<td>Environmental Specialist</td>
</tr>
<tr>
<td></td>
<td>Lindex, informant 1</td>
<td>Country Manager</td>
</tr>
<tr>
<td></td>
<td>Lindex, informant 2</td>
<td>Sustainability Developer</td>
</tr>
<tr>
<td><strong>National actors</strong></td>
<td>Government representative</td>
<td>Assistant Chief</td>
</tr>
<tr>
<td></td>
<td>Supplier</td>
<td>Factory Manager</td>
</tr>
<tr>
<td><strong>Organizations/Association/Consultants</strong></td>
<td>Organization 1, informant 1</td>
<td>Data Management and Communications Officer</td>
</tr>
<tr>
<td></td>
<td>Organization 1, informant 2</td>
<td>Local Lead for the Textile Sustainability Platform</td>
</tr>
<tr>
<td></td>
<td>Organization 2</td>
<td>Associate Operation Officer</td>
</tr>
<tr>
<td></td>
<td>Organization 3</td>
<td>Environmental Advisor</td>
</tr>
<tr>
<td></td>
<td>Organization 4</td>
<td>CEO</td>
</tr>
<tr>
<td></td>
<td>Consultant 1</td>
<td>Manager</td>
</tr>
<tr>
<td></td>
<td>Consultant 2</td>
<td>Knowledge Management Officer</td>
</tr>
<tr>
<td></td>
<td>Consultant 3</td>
<td>Managing Director</td>
</tr>
<tr>
<td></td>
<td>Textile Association representative</td>
<td>Joint Secretary, Trade Promotion</td>
</tr>
</tbody>
</table>
4.3 Data analysis
In the next step, after the interviews have been conducted, it is necessary to compile and categorize the interview material in order to make an analysis of the findings. The initial step is to transcribe the recorded material in detail, which will enable to use the material as quotes in the study and allows for transparency in the analysis process. (Alvesson, 2011). Furthermore, as the interviews are being used to depict perceptions on water management the transcription was done in a manner which allows for a qualitative content analysis of the material, rather than focusing on specific wording and intonations (Kvale and Brinkmann, 2009). This means that although the transcriptions are exhaustive they do not include specific intonation of words or pauses etc., but have rather been made in manner that allows for a flowing read. As the transcribing process is time consuming the limits of this study made the number of 14 interviews feasible and manageable and allowed for a more detailed analysis of each interview. From the transcribed material it is possible to extract the parts which are of most interest to the purpose of the study and categorize these according to the predetermined themes of the interview. (Alvesson, 2011). In the initial stage of the process the themes for coding related to the themes of the interviews (see Appendix 1) but as the material was gathered and analyzed it became clear that the major themes in the interviews were about barriers and opportunities related to water management, and the second step for categorizing according to themes was done by applying the classification framework developed by Stephen Trudgill (1990) (see chapter 3).

4.4 Additional data collection and analysis
Besides conducting interviews data collection on how the different water management actors engage in the issue has been gathered through the different policy and framework documents of the brands and the organizations. In the case of the brands the data has been gathered from their respective Codes of Conducts and Sustainability Reports, and these materials can be seen as an overview of how the brands relate to the water issue in formal terms as well how they relate their policies to national legislation. The Sustainability Reports have been used as a supplement to the Codes of Conduct to learn more about how they specifically relate to water issues. Additionally, the analysis of these documents have been done through a content analysis, where the reading of the text focused on extracting the parts regarding the environmental aspects of the brands’ work, and more specifically on water. These aspects will be used to understand differences between the management approaches of the different sectors involved in the water governance issue in Bangladesh.

Furthermore, in order to perform in-depth interviews it is of importance that the interviewer has a good knowledge base of the issue beforehand. This knowledge has been gathered through studying information in the form of scientific articles and reports on the subject of corporate responsibility and the textile industry, as well as of the contextual background of Bangladesh in terms of the water situation and the social and political structure. Information regarding the interviewees and the organizations they represent has been collected via their respective webpages and publications. A literature review has also been made in order to orientate amongst the previous research done in the area, as well as for the theoretical framework. Most of the data for the literature review has been collected through online databases such as Google Scholar, Scopus, ScienceDirect, and Elsevier.
4.5 The role of the researcher

As qualitative studies often include interaction between researcher and the individuals in the research area it is of importance to continuously consider the ethical aspects of the situation. As this study mostly builds on interviews the interaction aspect has been considered throughout the process. It is not only necessary to respect cultural background of the interviewees but also to be reflective about biased tendency from the interpreter. (Kvale and Brinkmann, 2009). This risk has been prominent in the conduction of this study as it not only includes informants from different backgrounds, but also since it aims at identifying these differences. Nevertheless, much effort has been put towards ensuring the research unbiased by not ascribing more importance to one interviewee’s perspective than any other. Furthermore, the preconceptions of the researcher in relation to expected finding have been dealt with by continuous critical evaluation of the analysis step of the thesis. Such an approach is what Alvesson (2011) calls pragmatic reflexivity and describes it as awareness of the relationship between the issue that is being studied and the researcher own background. In the case of this study it has been of crucial importance to consider this closely as the researcher shares cultural background with the retail brands in the study, and no ambition has been made to give presidency to these interviewees’ perceptions. Furthermore, as the thesis builds its empirical material on perceptions of the interviewees regarding the water governance situation in the textile industry, it is important to consider this in any generalization efforts made towards the larger stakeholder group that the interviewees are representing.

5. Barriers to good water governance

In this chapter a presentation of the first part of the empirical material will follow. The material is derived from the stakeholder interviews, and has been themed according to the framework developed by Trudgill. The theming was made in order to enable the identifying of what the stakeholders perceive to be the foremost barriers towards managing water sustainably. The chapter starts by presenting the main barriers related to reaching an agreement on the scope of the problem at hand, moves on to present the barriers in terms of knowledge and technology, and also to some extent economic barriers. In the last section the social and political barriers that might impact on how water is being managed will be presented. The findings in the chapter will be analyzed through the lens of institutional theory, and the analysis aims at considering how differences in institutional constructs could impact on the barriers. As a reminder it is also worth pointing out that the institutional framing of this study builds on the concept of water governance, and that the institutions inherent in the concept are the formal policies and informal behavior. As the water governance in Bangladesh includes stakeholders from different segments in society, as well as stakeholders with different cultural background, there are many dimensions to be considered.

5.1 Barrier to agreement regarding the water issue

Although the water situation in Bangladesh is an increasingly important issue to address due to decreasing groundwater tables and polluted surface waters, the first barrier towards managing the resource more sustainably can be identified as a lack of engagement from the stakeholders involved in the industry (Organization 1, informant 1). In this sense, the informant from
Organization 1 is concurring with the findings presented by Chowdhury (2010), where it is argued that other areas in society are competing for the water resources. The informant goes on to argue that it is difficult in the context of Bangladesh to engage the stakeholders, and especially government, on the issue of water management since there are many competing needs in the country that are in more acute need of attention today than that of water. Furthermore, for many of the national stakeholders it is difficult to realize the actual water situation of the country and the impact of the industry due to the large inflow of water from both rivers and precipitation (H&M, informant 2). This inability to prioritize water presents itself as a barrier to agreement amongst the stakeholders in this study since it is mostly the Bangladeshi stakeholders who have trouble realizing the actual water stress in the country. The Swedish brands that are sourcing from Bangladesh have in turn during the last few years received increased consumer pressure on providing sustainable product to be sold in the home country, and water management has therefore become a focal point for attention for many of the brands (H&M, informant 2). Due to the differences in how the stakeholders perceive the need to prioritize the water issue it is possible to consider the underlying factors that have shaped the norms and values inherent in respective society. Where the Bangladeshi stakeholder have formed their values and norms on a sort of shortsightedness that is the result of political instability and social insecurities, the Swedish context in turn has formed its informal institutions based on a long-term perspective which has developed as a result of social security and economic development (Khan, 2010; Andrews, 2008). In other words, the inability to prioritize water directly by the government in Bangladesh can be explained by the fact that the real water situation of the country, with decreasing groundwater levels, is not making itself known in the present, while social and economic factors are an overarching threat to most of the population. Nevertheless, the sustainability aspect has not always been present in the Swedish context either, but is rather a result of changes in the informal values of the Swedish consumers towards demands for sustainable products. This change in how Swedish consumers value their products could be seen as an example of why Swedish brands are a driving force for institutional change in the water management system in Bangladesh. According to the normative approach of institutional theory actors within a society conform to what is considered appropriate behavior. Leading form this, the way the Swedish brands are prioritizing water more than the Bangladeshi stakeholders could be seen as an institutional change due to normative pressure (Peters, 2000). In other words, there is a tangible difference between how the retail brands and the Bangladeshi stakeholders perceive the need to prioritize water management in the business agenda, and that these differences originate from the respective societies of the involved stakeholders.

Another barrier that can be identified in the interviews regarding agreeing on the scope of the water problem and importance of reforming the water management practices is the fact that most factories in Bangladesh can withdraw groundwater free of charge, and there is basically no regulation on how large volumes that can be extracted (Organization 3). This has also been discussed by Khan and Siddique (2000) as a reason for inefficiency of the public policies, since most factories in Bangladesh are located outside of the exporting zones and thereby do not apply to the regulation. This is an issue which both brands and external organizations are discussing as unsustainable in the future as it gives little incentives for the industry to decrease
the water consumption. As one of the interviewees from H&M argues, water should be free for citizens, especially those who are already living on subsistence level, but for the industrial use of water there should be a cost (H&M, informant 2). This is something that one of the respondents from Organization 1 concurs with by saying:

*For example, water in Bangladesh is priced so ineffectively. If you are a factory you pay basically nothing for water and you can just drill a hole in the ground and extract water, which is very risky at this stage particularly because the groundwater is declining at 1 – 2 meter every year. At one time or the other the water price needs to be upped, although it will not be popular among the textile industry.* (Organization 1, informant 1)

This means that both retail brands and the organizations which are promoting decreased water consumption by the industry agree that there is a need for a water pricing policy and regulation on how much water that can be withdrawn at one point. However, this is not a perspective shared by the majority of the Bangladeshi stakeholders. In institutional theory terms this lack of incentive for the stakeholders to change their water consumption patterns results in a path dependent structure. The theory claims that whenever the cost of an alteration is perceived as higher than the benefits the old patterns will consist (North, 1990). In this case the national level stakeholders are concerned with the profitability of the industry, and are therefore reluctant to make any changes that might impede on that. Furthermore, even if a policy of water pricing was to be implemented there is no guarantee that it would be accepted by the informal institutions in the society since their perception is still that of water as an abundant resource. As was mentioned in chapter 3 informal institutions are slower to change than formal policy, and such a situation creates a mismatch between the two institutions (North, 1990). Furthermore, the informant from Organization 3 goes on to argue that it would not be sufficient to only legislate on water pricing as it would still be possible for the suppliers to unregulated pump water from wells they drill themselves. By applying the normative approach, which says that societies act as they do due to what is socially accepted in that context (Peters, 2000), it could also be envisioned why the Bangladeshi actors to a large extent continue with wasteful and inefficient practices even though legislation and policies dictate otherwise. The norm in the wet processing of textiles in Bangladesh is to use large volumes of water and to discharge relatively polluted effluent. The fact that it is difficult to change such behavior could also build on the fact that the actual water situation of the country needs to be disseminated to the public and national stakeholders before the informal norms in society will be able to change.

Additionally, there is a barrier similar to that of water pricing as the stakeholders represent different views on the importance of making existing laws more stringent. This is also something that was presented in the background chapter, where it was mentioned that national legislation is either non-existent or simply have not been implemented in practice (Gain and Schwab, 2012). In regards to this, there is some disagreement amongst the informants in this study of whether or not the existing policies are enough to tackle the whole issue (H&M, informant 1; Consultant 3; Organization 3). Other informants on the other hand argue that there are laws from the government that have the potential necessary of regulating the water use and treatment in the industry (Consultant 1, Textile Association Representative, Organization 4).
There is in other words a disagreement on the effectiveness and necessity of regulating water use through further legislation (Organization 3). In the case of stringency of laws there is also a visible difference between public and private sector. H&M is for example considered to be one of the largest stakeholders in Bangladesh when it comes to textiles, and their water management policies tend to go beyond minimum level required by national law in terms of stringency (Organization 1, informant 1). As was presented before, both brands in this study are also engaging in water management projects governed by a third party, making their policy reach wider. There is however, another barrier in regards to deciding on the stringency of policy which concerns the way that the different informants relate to the policy issue. According to the informant from Organization 3 it does not seem to be any friction in the relationship between government and retail brands in regards to the different levels of policy stringency, more than that the retail brands might be a bit ahead of time. The informant from Consultant 3 on the other hand is more skeptical towards the coherence between government and brand goals saying that:

> You’ve got the government that is trying to facilitate the growth of the private sector, sees garment as an important part of the development, and they would not do anything that would affect that negatively. And then on the brand side they are saying that it is a straight forward commercial relationship between them and the factories. (Consultant 3)

The fact that there are differences in perception of the need for more stringent policy could be viewed as creating a mismatch between the policies implemented by the retail brands and the national legislation. On the one hand these differences could be analyzed by applying the perspective of historical institutionalism which claims that the power relations present at the creation of the institution will have longstanding effects on the direction and characteristics of the future development of that institution (Brammer et. al.; Peters, 2000). In the case of perceptions of the need for policy in the water management area it can be argued that the creation of policy in Bangladesh typically have been characterized by high levels of hierarchy and little interaction between sectors. The power relation between public and private sector can be seen as further complicated as the presence of foreign brands with other institutional backgrounds have become a prominent streak in water governance in Bangladesh (Brammer et. al., 2012). However, there is also a risk that the values inherent in the policies implemented by the retail brands are not represented amongst the Bangladeshi stakeholders, creating not only a gap in perception of level of stringency needed but also a gap between formal and informal institutions. In other words, the implementation of foreign retail brand policy will not automatically change the way water is being managed in the industry due to the underlying informal norms of the society. Although the gap in level of policy stringency is not considered to be of importance by the interviewees to any large extent, it can still be considered that the implementation of brand policy creates friction against the status quo structure of the Bangladeshi institutions (North, 1990).

As the chapter has now identified the barriers in regards to an agreement on the scope and importance of managing water differently in Bangladesh and also analyzed the existence of these barriers from an institutional theory perspective, the next step is to identify barriers in relation to knowledge and financial capacity amongst the different stakeholders.
5.2 Barriers in terms of knowledge, technology and finance

As was mentioned earlier there is an issue regarding prioritization between pressing issues, rendering the water governance a secondary priority. This issue is further accentuated by the general perception of the water situation in the country, where most people see it as a resource in abundance. It is this mindset which creates a knowledge gap between the perceived and the actual water situation (Government representative). Furthermore, there is generally a poor understanding and knowledge of the impact that the industry has on the surrounding environment and especially on the groundwater levels (Textile Association representative). Therefore it becomes important to find ways to motivate suppliers to make Cleaner Production (CP) changes in terms of making production more resource efficient or investing in new technology. This is of course a difficult task in a context where water is free to withdraw from the ground without any direct costs, and it therefore becomes important to show and raise awareness about the alternative cost to water. (H&M, informant 1; Lindex, informant 2). Today many suppliers do not even know how large volumes of water they use in the production, and there are hardly any incentives to measure it either (H&M, informant 2). The value of water increases in every process it goes through, and it includes costs for pumping, softening, and ratio of added chemicals to the water volume. And after that there is the price for treating the wastewater before it is being released into the rivers. (Consultant 3). By raising awareness of these alternative costs it makes for a business case of sustainable water use, and such an argument gives the factories an incentive to invest in new and better cleaner production technology that will benefit their bottom line in the end (Consultant 1; Organization 3; Organization 1, informant 1).

The business case approach can in turn be seen as culturally derived from the sourcing companies (Brammer et. al., 2012); however it is also a concept which hooks the suppliers of Bangladesh on board (Organization 1, informant 2). The business case of improving water use can therefore also be considered as the competitive isomorphism presented in the theory chapter (Fernando and Lawrence, 2014), and regards the fact that suppliers need implementing these new technologies, regardless of actual capacity to do so, since there are otherwise other suppliers elsewhere who will. Furthermore, the changes made towards implementing the business case into the production practice (and thereby consider the alternative costs for water) can also be seen as a result of pressure from the retail brands buying from the suppliers. However, as it is possible to see that national stakeholders, in terms of government and suppliers, in Bangladesh continue to unsustainably and inefficiently use water in the production of the textiles, even though the business case has been made and the benefits are presented, it could be seen as an example of the path dependency mentioned in the previous section, where the self-reinforcing of unsustainable practices can be seen as more economically viable in the short-term (Rixen and Viola, 2015). The self-reinforcement of unsustainable water use can in this sense be analyzed as a result of the fact that Bangladesh is dependent on maintaining a hot spot for sourcing cheap textiles. There is a risk that any changes to the business conduct will result in increased prices for the textiles, and thereby risking loosing market competitiveness towards other manufacturing countries. In other words, as unsustainable water use has proven to be profitable in the past this initial choice in business practices will continue leading to economic benefits as production is still cheap. The perceived risk of an alteration to the
production practices having higher costs than it will generate long-term benefits can thereby be seen as a barrier towards sustainable water management. It can be argued that the social and economic insecurity in Bangladesh creates the positive feedback loop which leads to path dependency in the first place (Rixen and Viola, 2015).

Nevertheless, making a business case for cleaner production is not only an issue of motivating and steering through policy, but it also includes the capacity of factories to adapt to the new policies. This is something that the informant from Organization 3 points out as one of the most important issues for sustainable water management; namely ensuring a capable management system. For the wet processing in Bangladesh this does not only include the owners of the factories but also the workforce who are managing the production process and who need training and knowledge on how to operate new technology and other changes. This change in management system is also something that Consultant 1 sees as one of their main services that they need to provide the industry with:

*Otherwise in Bangladesh you will find that many of the companies have the technology but that they have not been able to capitalize or make use of it because of this lack in management system.* (Consultant 1)

The change in management system can be seen as a way to correct for the gap between formal and informal institutions. If the management becomes adjusted to the policies which regulate water use, the informal norms would be influenced by knowledge. As North (1990) claims regarding the way institutions change it is the capacity of the society to gain new knowledge, innovations, and to undertake risks which determine the characteristics of change.

Furthermore, it seems as if there is a need to motivate sustainability at the supplier level through more than encouragement, and such an approach could be to go through the business relationship between brand and suppliers, since both parties are interested in a long-term relationship (Organization 1, informant 1; H&M, informant 2). As one of the informants from H&M mentioned, this approach gives leverage to the brand to put pressure on the supplier:

*“Bangladesh is important for us where we like to source from and we do have a work plan. But we also have the capacity to source more from other countries if our suppliers are more efficient there than they are here. So that’s how we see the long-term plan where we want a more sustainable set-up in Bangladesh in terms of organization, in terms of resources and in terms of action.”* (H&M, informant 1)

This way, in which brands can put pressure on the suppliers to change their business conduct, could be viewed through a power relations approach to institutional change (Fernando and Lawrence, 2014). Through this approach the most powerful stakeholder could influence the development of institutional change in a direction desired by them. In this case the powerful stakeholders are the sourcing brands, and their influence on the water governance issue could be amplified by the desire of the suppliers to maintain the business relationship with the brands. Although the brands perceive this pressure as resulting in voluntary engagement in cleaner production projects by the suppliers, such as the PaCT program (Lindex, informant 1), this
approach also run the risk of leaving the suppliers with no option but to comply if a business relationship is to be continued. The importance of the sourcing companies in the economy of Bangladesh and for the textile industry especially, has made Bangladeshi suppliers look more at the global markets and the demands made there. (Organization 4).

As can be seen there are barriers in terms of knowledge gaps in the Bangladeshi context, but these barriers are also not in the same magnitude as that of the agreement barriers. Instead, awareness rising and training in management practices can be seen as drivers for change and be the one thing needed to break out of the path dependency of old institutions, both formal and informal. However, it is important to consider the fact that in this study the knowledge being imposed in the Bangladeshi context originates from the context of western retail brands. It is thereby possible to consider the context appropriateness of the knowledge being disseminated. Nevertheless, although increasing knowledge amongst the national stakeholder could lead to institutional change there is a further barrier to realizing such a situation. In a country such as Bangladesh the financial capacity of the enterprises is limited and there is often more than one aspect of the business that needs capital. For example, many water management programs were initiated in the aftermath of the Rana Plaza building collapse which resulted in factory owners spending all available funds on improving fire and building safety (Consultant 3). Today attention has been given to try and find a macro level solution to green financing in the textile industry and the Bangladesh Central Bank has signed off on a financing scheme under the framework of the PaCT program (Organization 1, informant 2). This scheme would allow for suppliers to apply for a loan at lower interest rates, on the condition that the money will be invested in CP technologies or other greening of the production. This approach is new to the industry and it has yet to be generally acknowledged amongst the stakeholders (Consultant 3).

5.3 Social and political barriers
Besides lack of technological knowhow, management system, and financial resources there are also other underlying factors that might affect the development towards more sustainable water management practices in Bangladesh. For one thing, as has been pointed out in previous research and as one of the informants from H&M states, politicians in the country are exclusively focused on winning the next election and therefore focus their efforts on issues that will win them more political advantage. (H&M, informant 2). In other words, changes to the legislation regarding water use and treatment in terms of pricing or other forms of regulations are unlikely to be realized due to the unpopularity of such a political decision (Organization 1, informant 1), and politicians are overall reluctant to make decisions that are perceived as a potential threat to the economic development of the country (Consultant 3).

This political agenda is one of the major barriers to improving water governance from the national level, and it is also, as has been presented earlier, a determining factor in the overall governance capacity of the country (Gain and Schwab, 2012). The shortsightedness sets an example for all stakeholders who are operating in the country that future water shortage is not a primary concern. This structure in the formal institutions sets the formation of the informal institutions as well where factories continue to use exceeding amounts of water. However, in the context of Bangladesh it is hard to argue that shortsightedness has not been justified in the past considering the recent independence as a state and the economic situation of the country.
Even though the country is now receiving pressure from the sourcing companies from the western perspective the institutional structures are slow to change (Peters, 2000). Additionally, it is not only the textile industry that depends on the water resources of the country since there are also other industries, the agricultural sector, and households that use large volumes of water (Chowdhury, 2010). Such an aspect might also contribute to rendering water use for textile production a secondary priority as there is no guarantee that the other actors will manage water more sustainably. On a related note, even if water management in the textile industry was a priority there is a lack of capacity to actually ensure changes. (H&M, informant 2). There is an overall lack of enforcement capacity in the public sector in Bangladesh and it is one of the major challenges when it comes to ensuring sustainable water management (Consultant 1). According to the interviewee from H&M this lack of enforcement from national level renders the work of the brands much harder to realize (H&M, informant 1). In contrast to this it could also be argued that the absence of strong national law and enforcement capacity attributes more importance to the standards and policies introduced by the sourcing companies. Nevertheless, brands do not have any real enforcement authority, and most of the brands’ policies build on voluntary actions by the factories. Once the recommendations have been agreed upon the factories are only encouraged to uphold their commitment, never forced to. (Organization 1, informant 1).

Notably, it is this enforcement barrier which imposes one of the greatest challenges towards implementing sustainable water management policies in the context of Bangladesh. This barrier can also be considered to adhere to the insecurity which exists in the country on both social and political level, and are all interlinked with the economic situation. Not only is there a lack of capacity from the government side to find resources to enforce properly, there is also a lack of sufficient sanctions for non-compliance (Bigg and Ward, 2004). The absence of sanctions is also noticeable amongst the retail brands that do not have any real enforcement capacity. Their main leverage point is consumer pressure, which can only be effective to a certain extent since it builds on voluntary principles and brands therefore rarely find enough incentive to actually stop sourcing from non-compliant suppliers. However, it could be argued that the lack of enforcement capacity creates a lock-in effect in Bangladesh, where neither of the stakeholders have enough incentive to actually make any tangible changes to the way water is being managed (Rixen and Viola, 2015). The government’s main concern is the continuation of economic development generated by the industry, the suppliers can be considered to prefer old management practices as it requires less costly investments in technology and management training, and the brands on their side might have a pronounced water management agenda but are also concerned regarding increased prices for fabric (H&M; informant 2).

Furthermore, the lack of enforcement of formal institutions such as policy on sustainable water management practices can also be seen as creating informal institutions where it is socially acceptable to be non-compliant. For example, as the informant from Consultant 3 concluded there is a relatively comprehensive legislation in Bangladesh regarding effluent treatment plants (ETP’s) which decides on the required standards on water quality before discharge. However, due to the lack of monitoring on the coverage of such ETP’s there are no accurate numbers accessible for how many factories actually treat the water according to the standards, or even

1 Author’s emphasis
how many who are actually running the ETP’s continuously (Consultant 3). There is in other words a great need to overcome the enforcement barrier in order to ensure effective water management, but such improvements also require resources. In the case of Bangladesh such efforts would also compete with the capacity building in other areas of the industry, such as building and fire safety in factories (H&M, informant 2). Furthermore, as the Textile Association Representative emphasizes, the textile sector opinionates that if the brands are putting increased demands on greening of the industry, then they should also help with the investments that are needed for the cleaner production technologies. The brands on the other hand, which sees the relationship as solely commercial, do not feel they have responsibilities to ensure anything outside of their consumers’ demands. The brands are aware of their leverage point, and if sourcing becomes too expensive they can just source from another country (Consultant 3). Such differences in perception of responsibilities can also be seen through the lens of institutional theory as a power relation between the stakeholders where the Swedish brands leaves the suppliers with little or no choice but to make investments they may or may not afford (Fernando and Lawrence, 2014). Additionally, the issue of who should be responsible for the financing of the cleaner production changes can be seen as an inconsistency in clearly defined roles in the water management issue. Such a perspective regards all stakeholders in the industry and creates a potential gap in coherency of the coordination of actions.

5.4 Summary of barriers to good water governance

As have been present in this chapter there are several barriers regarding improving water governance strategies in Bangladesh. Although there are important barriers in terms of both agreeing on the scope of the problem and financial and knowledge aspects, the major issue seems to be regarding the absence of capacity and incentives to actually enforce the policies at factory level. Bellow follows a schematic overview of the main findings of the stakeholder perception on the current water management situation in the country. The next chapter will be dedicated to identifying solutions to overcome these barriers thorough a stakeholder dialogue.
Table 2: Summary of the barriers identified in the interviews regarding efficient water governance in Bangladesh today according to the framework developed by Stephen Trudgill (1990)

<table>
<thead>
<tr>
<th>Barriers</th>
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<tbody>
<tr>
<td>Agreement</td>
<td>Prioritizing between competing needs</td>
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<td></td>
<td>Disagreements amongst the stakeholders on what is considered adequate policies for water management</td>
</tr>
<tr>
<td></td>
<td>Different level of stringency of policies from public and private sector</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Lack of knowledge of alternative costs for water use</td>
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<tr>
<td></td>
<td>Lack of awareness about the actual water situation</td>
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<tr>
<td></td>
<td>Lack of knowledge towards the impact of the textile industry on water resources</td>
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<tr>
<td></td>
<td>Lack of efficient management system and knowledgeable workforce on cleaner production processes</td>
</tr>
<tr>
<td>Technology</td>
<td>Lack of access to new technology</td>
</tr>
<tr>
<td></td>
<td>Lack of capacity to implement new technology</td>
</tr>
<tr>
<td>Economic</td>
<td>Lack of resources to make new investments</td>
</tr>
<tr>
<td></td>
<td>Lack of incentive since water extraction is free of charge outside the exporting zone</td>
</tr>
<tr>
<td>Social/Political</td>
<td>Lack of enforcement capacity from government</td>
</tr>
<tr>
<td></td>
<td>Brands do not have real enforcement authority</td>
</tr>
<tr>
<td></td>
<td>Unwillingness to make changes due to the economic situation of the country</td>
</tr>
<tr>
<td></td>
<td>Attitude amongst stakeholders towards water management (non-compliance issue)</td>
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<tr>
<td></td>
<td>Lack of clearly defined roles amongst the stakeholders</td>
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</table>
6. Opportunities to improved water management through dialogue

Where the previous chapter has presented the barriers that can be identified regarding water management in textile industry, the following chapter will focus on the prospects of improving the water situation and to finding solutions to existing barriers through an inclusive stakeholder dialogue. The dialogue itself aims at creating a common platform for public and private sector which potentially could lead to increased coherency between the sectors in terms of policy and enforcement. Although there are also challenges related to implementing a dialogue platform where a diverse set of stakeholders participate, this chapter will focus on the opportunities related to solving the problems to managing water more sustainably that have been identified in the previous chapter.

6.1 Reaching agreement through dialogue

On issues where there is not only a diverse group of stakeholders involved but also different definitions of the problem at hand, it is of importance to try and coordinate actions and to motivate further development and coherency. Such coherency is expected to be found in a stakeholder dialogue, but firstly a platform for such dialogue must be created. This thesis is, as was presented in the background chapter, focusing on the sustainability platform for dialogue organized by the PaCT program. Through this approach the program aims at creating an enabling environment where stakeholders from different sectors with interests in the textile industry can meet each other. The platform is expected to be able to gather representatives from different segments in formal settings where discussions can take place under the moderation of the PaCT program. In the dialogue the stakeholders can share their views of the problem and they can unanimously identify potential solutions and roadmaps for action (Organization 1; informant 1). The aspect of creating a space where stakeholders can meet and share their views with each other is also what the stakeholder engagement theory points out as the most important in avoiding disputes in issues where a multitude of stakeholders are present (Orr, 2013). The platform would further allow for the stakeholders to take responsibility and take ownership of the problem which is necessary for action to be taken. This ownership is a way to sensitize the stakeholders such as policy reformers, the government, civil society, academia, and business to engage in the issue at hand. (Organization 1, informant 2). Coordination of action can be enabled through the division of responsibility between the stakeholders and increase the engagement level of the participants as a more holistic view and shared sense of community in the water issue can be disseminated. This coordination through constructive participation is most commonly expected to occur in a situation of dialogue. In such a way, the barrier of engagement to reaching an agreement can be overcome (Roberts, 2015).

Furthermore, as the Textile Association representative informant argues, there is a lack of sufficiently synchronized and progress oriented dialogue today. There are several forums in which the industry is participating and discussing, but there is rarely any tangible actions made in the aftermath of these forums. Nevertheless, the informant goes on to argue that the platform which is being created by the PaCT program has a good chance of providing the kind of dialogue that is needed and that it is a good initiative towards realizing the improvements needed in the industry. The proposed dialogue could also ensure that stakeholders who otherwise have different agendas and engagements actually meet and share their different
perspectives. In this aspect the PaCT program is an important ingredient in order to create this form of platform, seeing as it is one of the few entities present in the country with the mandate to gather such a diverse set of stakeholders (Organization 3). Furthermore, by implementing a stakeholder platform for dialogue it would open up the possibility of finding common ground on the scope and importance of the water issue. This is of course dependent on how the stakeholders engage with each other in the dialogue and whether or not all stakeholders have equal opportunity to share their agenda (Orr, 2013). In the context of Bangladesh this approach requires that the culture in which interaction between sectors changes into a more inclusive atmosphere. Although this informal institution might prove to be difficult to overcome, due to hierarchical structures, the stakeholder dialogue could have the capacity to create a space where consensus on which action to take for the industry as a whole could be reached. The informant from Organization 2 also points to the opportunity of improving water management practices by identifying which stakeholder is pushing for a specific issue and give them space to lead those issues closest to their agenda. Such an approach would enable effective stakeholder engagement. Moreover, according to the same informant it is possible to already see an increased motivation for collaboration amongst stakeholders in the coming years and he says that:

> Time is better now than it was five years ago for a dialogue. The resources will get scarcer, it will not be only about having water like an absolute quantity, you will also have to think about quality. And that is across all industries. Economic development will make the situation even worse with more factories coming, more agriculture happening etc. And all this will be further worsened by climate change. So these are very powerful drivers for effective dialogue to motivate the stakeholders to come to the table. (Organization 2)

Additionally, according to one of the informants from H&M it is likely that more action will be taken in the right direction if only the legislation is in place (H&M, informant 1). The stakeholder dialogue platform can also allow for a space where the brands more systematically can put consumer pressure on the suppliers. There are different levels of this pressure where the brands can either encourage through soft methods or simply make it a requirement for continuing to source, but if the brands can unite around the same approach it becomes more powerful. According to the informant from Organization 2 this is what makes the brands a critical part of the dialogue. In other words, the dialogue platform also seeks to solve the barrier towards difference in stringency by allowing for the brands to have a space where they could partly exercise their power as important stakeholders in the country and in the industry, but also to disseminate normative influence.

### 6.2 Overcoming knowledge and technology barriers through dialogue

Concurring with the aim of the stakeholder dialogue platform by the PaCT program both Organization 2 and Organization 4 are working actively towards motivating stakeholders to engage in dialogue. In accordance with the stakeholder theory presented in chapter 3, it was stated in the interview with Organization 4 that a dialogue can be used to raise awareness of new issues and start initiatives within that space. It is in other words, an effective tool for
outreach, and once the platform has been established it is also possible to use it to disseminate best practice example of water management amongst the audience and to make the business case for CP investments. The informant from Organization 2 also points to the benefits of a platform for dialogue by saying:

*The role of a successful and structured dialogue platform is to make recommendations for different changes and to monitor the implementation of these recommendations. It should also offer support to the stakeholders.* (Organization 2)

Nevertheless, working with environmental issues, and water management especially, is very complex in a country like Bangladesh since there is a lack of competence within the country, both in terms of knowledge and technological availability (Hoque and Clarke, 2013). This is also something that H&M motivates as one of the core reasons for engaging in stakeholder dialogue, to actually enable a transfer of capacity from the brands and developing partners to the national stakeholders in Bangladesh (H&M, informant 2). The dialogue platform could also offer an effective space for the actors, especially trade associations, to impact the banks to offer loans with more concessional interest rates for cleaner production investments and to disseminate the information to the suppliers (Organization 1, informant 2). In this sense the dialogue will be used to increase the knowledge base of the stakeholders and to increase the capacity of these stakeholders to take necessary steps towards sustainable water use. The platform, as a space for outreach, could also be used to present the business case of implementing cleaner production technology as it saves financial resources throughout the production process. The shared responsibility discussed above would also contribute to a sense of security where suppliers are more likely to make the risk in financing the changes in production practices as the brands are involved at a closer collaboration.

### 6.2 Overcoming social and political barriers through dialogue

The previous sections have discussed the potential of a stakeholder dialogue platform to increase efficiency in finding an agreement to the water problem amongst the stakeholders as well as how the platform could enable the stakeholders to overcome the capacity barriers in terms of lack of knowledge, technological availability and financial resources. The following section will turn to the social and political barriers identified in chapter 5 and the potential of the platform to overcome those issues as well.

First of all, in Bangladesh it has been argued that the hierarchical structure is predominating the way politics are done (Connick and Innes, 2003). By creating a dialogue platform where all participants agree to share their perspectives and listen to the other participants with an open mind could decrease the gap in status and power amongst the stakeholders (Organization 1, informant 2). The hierarchical structure exists across the sectors and in every segment in the society, and for the dialogue platform this is of course a challenge. This is especially the case when there is more than one governmental department present in the dialogue as the structure is much pronounced at the governmental level. It is also common that more than one governmental official is present at the dialogue since it increases the legitimacy and credibility of the process (Organization 3). However, the dialogue could still prove effective as long as
each stakeholder is aware of the hierarchical structure and learns how to act within it (H&M, informant 2). The hierarchical structure in Bangladesh, with high power distances between different sectors, is one of the major differences between the cultural contexts of the Bangladeshi stakeholders and the Swedish retail brands and could also be seen as slowing down the development of a good water governance climate in Bangladesh. According to one of the informants from H&M, another aspect of importance when creating an effective stakeholder dialogue is to ensure that the right gatekeepers are included. These gatekeepers are the stakeholders who have the capacity to actually influence policy on water management. In this sense an effective dialogue platform is essential as it requires the initiators of the platform to be traversed on who these stakeholders are and have the mandate to bring them into the dialogue. As was mentioned earlier, this capacity to ensure a composition of relevant stakeholders is one of the strengths connected to the ability of the PaCT program and other programs like it (H&M, informant 2). In other words, the stakeholder dialogue platform does not only have the potential to include stakeholders from different sectors, but also to ensure that these are the stakeholders needed for actual and tangible change in the water management in the industry, and thereby also making the progress of water governance more action oriented. However, the informant from H&M goes on to argue that the formal setting of the dialogue platform sometimes makes the process stagnant, and that sometimes it is more efficient to meet in more informal settings where conversation is less strict and relationships become more genuine.

Furthermore, it can be argued that the fact that the government lacks the capacity to enforce its legislation effectively increases the governance mandate of the brands. This is due to the fact that the textile industry is one of the most important sectors in the country and both associations and government want the sector to continue growing, which in turn means that brands must continue sourcing from the country. The relationship is described by the informant from Organization 2 as:

*They [government] will want the buyers to buy more, and then buyers can say that they want certain things to be done in the production process, like more efficiency in water use etc.* (Organization 2)

The dialogue could then, as mentioned before, function as the space where the brands convey this mandate and collectively show their leverage point in the water governance issue. However, the informant from Organization 3 is skeptical towards the influence capacity of brands on national legislation, saying that it would be more beneficial if the brands focused on enforcing and monitoring existing laws and regulations instead. That is the sort of muscles the government is lacking, and not the actual policymaking. A similar reasoning can be found in the interview with Organization 2 where it was said that the private sector should only be driving issues in the dialogue that are of market-based character, while the public sector should be driving the issues which are in need of regulatory policy. Intended issues that fall under regulatory issues are concerns about environmental aspects and long-term development. However, as the Swedish consumers are today demanding more sustainable production of their products it can be argued that good water governance is market driven and that the brands in such a way also must engage in the regulatory aspect of water management in the absence of governmental capacity.
In this aspect it becomes clear that the authority to enforce and influence policy is complex. Nevertheless, although the power relations are prominent in Bangladesh, where the government has the power to overrule any policy recommendations made in the dialogue they deem unsuitable (Government representative), an effective stakeholder dialogue is argued to be the best way to influence how water is being managed and where progress can be monitored. Furthermore, there is also the issue of what mandate foreign brands have to try and influence national policy. According to the informant from Organization 1, H&M is probably the only brand today that has any real impact on how national level perceive the policy issue (Organization 1, informant 1). Nevertheless, in most cases the brands need to go through their national embassies to influence the government (Organization 4). Through the creation of an effective dialogue it would allow for the brands to actually share their views and knowledge directly with the national level as well. However, in Bangladesh there has never been a culture where stakeholder from different sectors and segments of society could meet and commonly discuss these kinds of issues, and it is thereby one of the greatest potentials for the kind of stakeholder dialogue platform discussed here (Organization 1, informant 1).

6.3 Summary of the prospects to improving water management through dialogue
The following table shows an overview of the stakeholder perception of the prospects to increase efficiency and sustainability in the water management practices in Bangladesh through the implementation of a stakeholder dialogue platform.
Table 3: Summary of stakeholder perceptions on increasing the sustainability of the water management in the textile industry.

<table>
<thead>
<tr>
<th>Prospects to improving water management through stakeholder dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agreement</strong></td>
</tr>
<tr>
<td>Through a dialogue the diverse stakeholders can unanimously agree on the scope of the problem which actions that need to be taken</td>
</tr>
<tr>
<td><strong>Knowledge/technology/finance</strong></td>
</tr>
<tr>
<td>The dialogue is a good space for awareness raising of the actual water situation in the country, share experiences from the industry and show best practice examples</td>
</tr>
<tr>
<td>The dialogue could be used as a space to transfer capacity from brands and other developing partners to the national stakeholders in Bangladesh</td>
</tr>
<tr>
<td>The dialogue platform could be used to influence national banks to make concessional loans for CP investments.</td>
</tr>
<tr>
<td><strong>Social/Political</strong></td>
</tr>
<tr>
<td>Enabling a culture in Bangladesh where stakeholder from different sectors and segments can meet and discuss the issue at hand and creating a space where hierarchical structure is less important</td>
</tr>
<tr>
<td>In the dialogue it would be possible to ensure that each group of stakeholder takes responsibility and ownership of the problem → sensitizing action!</td>
</tr>
<tr>
<td>The dialogue could be used to identify which stakeholder should be driving a specific issue, and the specific gatekeepers needed for policy change</td>
</tr>
<tr>
<td>Brands can use the dialogue platform to synchronize their leverage/influence towards both suppliers and government</td>
</tr>
</tbody>
</table>

7. Discussion

The previous two chapters have now presented the barriers towards developing a more sustainable water governance structure in Bangladesh, and how these barriers could potentially be overcome by the implementation of a stakeholder dialogue platform. These findings have also been analyzed by applying institutional theory as a way of considering why there might be difficulties in combining engagement from stakeholder from different cultural backgrounds. The theory has also been used as a way of looking at why institutions regarding water management are slow to change into more sustainable and efficient structures. The next step of the thesis is therefore to discuss these findings in relation to each other in order to draw conclusions regarding the future prospects of increasing the efficiency and sustainability of the water management process in the textile industry in Bangladesh. The discussion will also
consider the appropriateness of creating more homogenized institutions between the actors of different cultural heritage in the context of Bangladesh and what the challenges and risks are in relation to it.

As can be seen in the body of previous research presented in chapter one of this thesis, the water governance issue in Bangladesh is not easily solved. There is a wide set of stakeholders involved in the textile industry, and they all have their own agendas and goals (Organization 1, informant 1). This is also an issue that has been pointed out in the interviews conducted in this study and it has been claimed to add to the complexity of the water governance problem in the country. The variation of stakeholders with different cultural backgrounds and perceptions of the need to prioritize water is also one of the main reasons for why difficulties of agreement of the scope of the problem are present amongst the stakeholders. The agreement barrier, along with lack of knowledge and efficient management system and available technology at the factory level can be seen as taking the form of both polluted surface waters and over exploitation of water resource. This is especially carried out in the fact that the wet processing of textiles in Bangladesh is far more water intensive than the best practice example available (PaCT b). Although several of the barriers that have been identified in this study have precedence in previous research as well (Gain and Schwab), the findings in this thesis goes further by arguing that these barriers are resulting from the overall institutional setting and lack of public sector capacity to manage the water issue in Bangladesh. It is also these aspects that the PaCT program presented in this study is focusing on in their development of the sustainability platform (PaCT f). In this study, the PaCT program also represents to a large extent the engagement of the Swedish brands in the governance issue of water. The program is what distinguish the brand policies from the national legislation, seeing as the brand policies otherwise build on the national legislation as a minimum requirement for all the factories to comply to (H&M Code of Conduct, 2010; Lindex Code of Conduct, 2015).

This is also the first instance where it is possible to detect that there is a difference in how the informants from different cultural backgrounds perceive what adequate water governance entails. The cultural background has been applied here in order to consider why these differences have appeared from the beginning. It has also been argued that the policies by the brands are shaped according to the societal demands in their home country, and that these demands are a result of the social and political situation in Sweden (Andrews, 2008). This means that since the Swedish society has experienced an upswing in environmental concern this trend is also present in the environmental engagement the brands are showing towards sustainable production of textiles. Bangladesh in turn has, and is still, fighting poverty, and drawing from the interviews conducted in this study it can be argued that the insecurity in the country has left environmental concern in the periphery of the development agenda. This is also in line with Chowdhury’s (2010) research on competing needs and agendas which also requires resources and political attention. In other words, the historical development of the institutions in the two contexts has been of different character. It is also these initial preconditions of the institutions which can be used to analyze the underlying factors to why there are difficulties in agreeing on the scope of the water problem and possible solutions (Peters, 2000).
In relation to the difficulty in agreement regarding the problem at hand, the stakeholder dialogue is aiming at enabling a space for the stakeholders to meet and share their views and experiences. This is also what the stakeholder engagement theory argues is one of the greatest benefits of dialogue amongst stakeholders (Orr, 2013), and as has been argued by the informant from Organization 1, a culture of sharing amongst stakeholders is what has been missing in Bangladesh before. This is to a large part due to the hierarchical structure in the political and social sphere in the country, which in the past has made collaboration between the different levels of stakeholders difficult. The PaCT program is one of the few instances in the country which has the capacity to gather stakeholders from the different sectors and segments in society, and aims at ensuring a space where the different stakeholder can meet on equal terms and discuss the issues of the industry (Organization 1; informant 1). However, the fact that the hierarchical structure is so heavily rooted in the country makes such an approach difficult to realize (Khan, 2010). Moreover, although it is argued that dialogue is the best available solution to the incoordination in the industry today, it is difficult to gather representatives from all the stakeholders in one room at the same time due to their busy agendas. This is especially the case with ministers of different departments and ministries, and even when it is possible to gather them all there is an internal power struggle between the different ministers in the country (H&M; informant 2).

However, the sharing of knowledge and awareness raising within the platform could, in the best outcome, result in a normative influence on the structures of the institutions (Peters, 2000). The normative influence could then potentially enable the norms between the Swedish buyers and the Bangladeshi actors to gradually coincide with each other, and thereby also increase joint action on the water issue. This is something that can be found in the literature regarding institutional theory and it is argued to be a homogenization of the different norms and values that exists between the two cultural contexts included in this study (Fernando and Lawrence, 2014). Furthermore, in accordance with Brammer et al. (2012) it is possible to discuss the normative power of the Swedish retail brands in terms of decreasing the hierarchical structure in Bangladesh by introducing values from the Swedish decentralized structure. When stakeholders from one institutional context then engage in policy making activities and share their values in another context they have the potential of impacting on the institutional setting of the new context. However, if it is possible to envision a situation where the Swedish brands have influence over how the water resources in Bangladesh are being governed it is also important to discuss the reasons for the engagement in the issue by the brands. As Matten (2006) argues, the brand motivation for engaging in issues in their sourcing countries builds on the values and norms existing in their home countries. This is of course also in line with institutional theory and the idea that formal rules are rather quick to change in order to be in line with the informal values of society, given that these values are beneficial for society at large (North, 1990). Leading from this it is easy to draw the conclusion that the Swedish retail brands are engaged due to the increased environmental awareness amongst the Swedish consumers, and it is also something that the informants from H&M and Lindex proclaim as an important factor. However, they also argue, along with Brammer et al. (2012), that it makes business sense to ensure more sustainable production, seeing as less resource intensive production processes leads to decreased overall costs as well. This sort of engagement has developed from the earlier
view of brand engagement first presented by Drucker (1984) where he ascribes the brands’ efforts as purely external to the business and philanthropic. The fact that the greening of the business is beneficial in more ways than one also generates more credibility to the engagement as it otherwise is possible to question the risk of green washing of the business, which means that the brands only engage to the degree that they manage to maintain their image towards the consumers. Nevertheless, if the brands engage on the basis of self-interest (which businesses most commonly do), the appropriateness of the influence on the local context of Bangladesh can be questioned.

Leading from this, considering that the brands actually have the capacity to influence how water is being managed in Bangladesh they will want to influence in a way that is most beneficial for them and which will bring them more competitive advantage on the global market (Matten, 2006). The suppliers in turn are also concerned about the market advantage and keeping the business relationship with the brands, which is also the foremost reason for why they enter programs like PaCT after the brands nominate them (Organization 1; informant 1). However, although there are clear benefits of changing management systems and investing in cleaner production the question of production costs remains. This issue has been configured in the thesis as the way the government show reluctance to making changes which might impact negatively on the continuous economic development of the country (Organization 1; informant 1). The brands and suppliers on their side are also reluctant towards the risk of increasing the prices, especially considering the dispute regarding who should pay for the costs (Organization 3). Although the stakeholder dialogue platform has been developed with the aim of creating greater coherency amongst the stakeholders and disseminating their responsibilities, such as the issue of financing cleaner production investments, the dialogue also run the risk of creating a space where the most powerful stakeholders can practice power over the others (Fernando and Lawrence, 2014). In the case of water governance, chances are that it is the brands that will get the ultimate influence as both suppliers and government are keen to maintain a good relationship with the brands.

However, not only is it possible to question the appropriateness of allowing foreign brands to dictate the development of a country due to differences in understandable about the local context, it also raises the issue of balance between institutions. The presence of the foreign brands brings with it a new set of values to the context of Bangladesh, which is represented in both formal and informal institutions amongst the stakeholders (North, 1990). The formal institutions adhering to the brands, which have been discussed previously, take the form of brand policy in the Codes of Conduct and the PaCT program, and are in many instances more stringent than the national legislation on water management. Implementing these formal institutions might, nonetheless, lead to inefficiency due to a mismatch in the perceptions and agreements where the informal norms, in terms of perception of need to protect the water resources, of the Bangladeshi society are not at the same level as that of the formal policies implemented by the brand (North, 1990). Nevertheless, it is clear that a majority of actors in the textile industry are engaging in cleaner production improvement in order to please buyers in one way or the other. In this sense it might be possible to discuss the appropriateness of implementing programs like PaCT in the context of Bangladesh due to the high impact of
outsider influences, which may or may not overshadow the local needs for prioritization. On a related note, if it was the case that all suppliers followed recommendations and policies from brands and the government made national legislation more stringent, there would be no problem with non-compliance in the industry. However, as can be seen from the interviews, non-compliance to formal regulation is very much present in Bangladesh. In order to understand such a behavior it is possible to consider the fact that although formal rules have the capacity to adjust to new societal values rather quickly, informal norms are much slower to change (North, 1990). It is possible to question why such a behavior prevails although the benefits of making the changes have been made clear. This leads to barrier in knowledge where the Bangladeshi stakeholders, and especially the suppliers, lack in knowledge and understanding of what the actual water situation of the country looks like with decreasing groundwater levels each year. As the informant from H&M stated there is a shortsightedness in the country which is difficult to prevail (H&M; informant 2). Furthermore, as have been discussed by the informants from both brands and organizations included in this study, very few of the suppliers are aware of the alternative costs for water use and it therefore is seemingly free of charge. As was mentioned in the theory chapter, it is not until the perceived benefits of making changes exceed the costs for business as usual that motivation for compliance appears (North, 1990). In this instance, the dialogue platform could help disseminate the knowledge necessary to see the benefits in the long-term and incentivize compliance through building trust and relationship structures amongst the stakeholders, especially brands and suppliers (Organization 4). By increasing the knowledge and awareness regarding the water situation, and also enabling finance and technological availability the dialogue has the potential to help solve the issue of mismatch between institutions as the sharing of knowledge also has normative powers, where shared understanding of the problem could enable the Bangladeshi stakeholders to adapt to brand policy, or more stringent national policy, at a faster rate (H&M; informant 2).

As has been mentioned earlier, it is the capacity of the dialogue platform to create a knowledge sharing space that is needed in order to overcome the different barriers to efficient water governance in Bangladesh. Keeping in mind that the political structure in the country, with high levels of hierarchy, is also the reason for why there is an overall lack of accountability towards the national policies and frameworks (Gain and Schwab, 2012). It could be seen as an explanatory factor for the culture of non-compliance amongst the Bangladeshi stakeholders, and it is something that the brands in this study consider as an important factor to be aware of and that it is necessary to learn how to navigate around it (H&M; informant 2). The issue of non-compliance is also one of the most prominent barriers identified in this study and it goes hand in hand with the fact that the public sector lacks the capacity to enforce policies and regulations (Bigg and Ward, 2004). Furthermore, almost all of the interviewees included in the study concur that there is a dire need to improve the enforcement capacity of the public sector in order to allow for any polices to have effect on the water governance issue. The lack of enforcement by the public sector in the country could be explained by either lack of resources to monitor or lack of sanctions to incentivize compliance (Bigg and Ward, 2004). It is here that the enforcement perspective gets interesting as the government has the theoretical power to enforce the policies but lacks physical capacity. The brands on the other hand could have the capacity if they were given the mandate to enforce. Instead, the brands can only encourage
through soft methods and potentially leave the supplier (Consultant 3). However, it is possible to question how serious the brands are to make real of their threats to leave, seeing as there are transaction costs involved in such a decision as well. Instead, it seems as if the dialogue offers the best alternative to actually create enforcement capacity since it would be possible for the brands to collaborate in order to increase their leverage through a collective action approach (Organization 2). If more, or all, foreign retail brands present in Bangladesh collectively agree on the demands they want to enforce their capacity to do so increases. However, the appropriateness of such an approach can be discussed as it hardly leaves the suppliers any choice but to make investments they may or may not be able to afford.

Meanwhile, although the benefits of dialogue have been discussed by the stakeholders in this study, along with the previous research, the formality of the dialogue can be questioned in terms of effectiveness. This is also something that one of the informants from H&M mentions and it was pointed out that in some cases it can be more efficient with informal meetings amongst the stakeholders. This is due to the fact that informal meetings easier leads to trust building in the business relationships, and enables targeting of actual gatekeepers of important issues (H&M; informant 2). Where the formal structure of the PaCT dialogue platform and other initiatives like it requires ministers to be present in order to legitimatize the dialogue (Organization 2), informal meetings can avoid bureaucracy and target the people actually responsible for implementing the change (H&M; informant 2). Nonetheless, the dialogue has the potential of disseminating roles and responsibilities in the water governance issue (Organization 1; informant 2). Responsibility and ownership give incentive to the stakeholders to actually fulfill the commitments made in the dialogue platform. In such a way the dialogue also becomes action oriented, which is something that the informant from the textile association mentions as one of the most important features of a dialogue platform. Looking at this issue through the lens of institutional theory, incentives are necessary to avoid ‘lock-in’ effects of the institutions (Rixen and Viola, 2015). If there is distrust amongst the stakeholders it decreases the chances of collaboration as everyone will be concerned of ensuring their own interests and agendas in the first place (Grover and Krantzberg, 2013). If there is no guarantee that the others will fulfill their part then there is little incentive to be responsible overall. This ‘lock-in’ of institutions can also lead to the self-reinforcement of said institutions as the initial choices for production practice will continue to generate profits if the brands have too little incentive to actually stop sourcing from the country due to the low labor and production costs (Rixen and Viola, 2015). That is, until the water resources are depleted. Furthermore, if the dialogue could be used to identify the stakeholder with most vested interests in each issue of the governance issue and allow them to lead the progress, several of the interviewees saw this as a great potential. However, it is possible to take a skeptical stance against such an approach as it once again might lead to the outcome that only the most powerful stakeholder are allowed to influence the development.

To conclude this discussion on the potential to overcome the barriers presented in this study it is possible to draw from the previous research which claims that the most important aspects of good water governance include accountability, transparency, participatory processes and decentralized decision making (Gain and Schwab, 2012). These are all aspects which are
currently absent in Bangladesh, but it also something that the stakeholder dialogue platform aims to correct. Creating a new governance climate in Bangladesh is definitely necessary seeing as collaboration between stakeholders requires trust and social capital in order to be efficient. Once power sharing amongst the stakeholders has been achieved it opens up the possibility of reaching a more holistic solution to the problem at hand (Grover and Krantzberg, 2013; Ansell and Gash, 2007). On a positive note, it was mentioned during the interview with Organization 2 in this study that the conditions for dialogue are better now than they have been before in Bangladesh. However, this is of course due to the fact that climatic changes and the rapid degradation of water resources in the country are becoming increasingly prominent, which in turn has led to a better understanding of the urgency of improving the water management system. Nonetheless, regardless of the challenges related to the implementing of an effective and action oriented dialogue, it can also be said to be the best option for developing the water governance issue in the industry. The dialogue approach is not only the most inclusive approach available, it is also the only approach which includes possible solutions to all the barriers identified in this study. Although these barriers are not extensive enough to be claimed to cover the entire water governance issue of the industry in Bangladesh, the capacity of the dialogue platform to overcome this sample of barriers is promising for the inclusion of future potential barriers as well. With these words the thesis will leave further research on the development and effectiveness of stakeholder dialogue for a more extensive study on the topic.

8. Conclusion

In the beginning of this thesis three research questions were posed regarding 1) the barriers towards more sustainable water management, 2) the impact of institutional differences, and 3) the prospect of increasing the sustainability in the water management through a stakeholder dialogue. The purpose of this thesis has been to seek potential answers to these questions, and after having analyzed and discussed the findings in the empirical material it is possible to draw conclusions on the water management issue in Bangladesh.

The identification of the barriers towards reaching more sustainable water management practices builds on the perceptions of the interviewees in this study, and it is possible to conclude that there are several barriers related to wet processing of textiles. The identified barriers concerns reaching an agreement of the scope of the water issue amongst the stakeholders, the lack of knowledge of the actual water situation and on cleaner production technology, and on the social and political structure in the Bangladeshi society. The findings has support in the previous research, but as this thesis also includes the stakeholder dialogue as a potential solution to the water governance issue it contributes to a more holistic overview of the water governance situation in the country.

Drawing from the learning’s from previous research and interviews it is possible to say that the current water governance issue in Bangladesh is complex. By additionally applying the conceptual framework of institutional theory to the analysis of these barriers the thesis has also been able to argue that the multitude of interests in the textile production increases the complexity of the governance of water in Bangladesh. The fact that the involved stakeholders
originate from different cultural backgrounds, and thereby structure their institutions of water governance differently, is analyzed as increasing the difficulty of coordinating the action needed to improve the water situation.

Furthermore, this thesis has also analyzed why and in what way institutional settings change over time and how different institutions impact each other. In such a way the stakeholder dialogue platform has been argued as to create a space for the stakeholder to meet and share their experiences in order to enable increased coherency between the different institutions. If a dialogue platform could enable a space where the stakeholders meet on equal terms it is argued to have the capacity of overcoming the above mentioned barriers and create a homogenization of the institutional structures inherent to the water governance in Bangladesh. Such a homogenization would entail increased understanding of each other’s agendas and goals and thereby also increase the possibility of collaboration amongst the stakeholders in a way that is unprecedented in Bangladesh today. Nevertheless, as the political structure entails high levels of hierarchical structures in the country it also determines the likelihood of the Bangladeshi stakeholders to adopt policies and recommendations made by foreign brands and the PaCT program. It is therefore necessary that the dialogue platform manages to break through this structure and ensure that the stakeholders can meet on equal terms.

However, although the dialogue platform is argued as an efficient way of overcoming the barriers, and thereby enabling more sustainable water management, it will be necessary to stay vigilant towards which direction the development is taking. This is important in order to ensure that it is not only the interests and agendas of the Swedish retail brands that are being reflected in the governance outcome. Influence from western culture and governance strategies will be necessary to ensure that the water use in the textile industry moves towards more sustainable practices. However, such an approach will only be sustainable if a balance between foreign influences and the Bangladeshi context and preconditions can be found.
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Interviewees:

H&M, informant 2. Environmental Specialist. (2015-03-05)
Government Representative. Assistant Chief. (2015-03-16)
Organization 1, informant 2. Local Lead for the Textile Sustainability Platform. (2015-03-12)
Textile Association Representative. Joint Secretary, Trade Promotion. (2015-03-24)
Appendix 1
The interview guides for interviews with brands, government, and organizations

The interviews will follow five main overarching themes and theme related questions will be asked for each theme:

面试指南（品牌）

1) 品牌参与水资源问题
   • 如何是品牌参与在纺织行业在孟加拉国的水问题？
     o 什么努力是去水管理变化在工厂水平由品牌?

2) 政策一致政府和品牌
   • 品牌政策与国家水管理政策在孟加拉国的立法和政策相关吗？
     o 级别的一致性

3) 政策实施挑战
   • 在纺织行业在孟加拉国实行新政策的挑战是什么？
     o 工厂对品牌政策的适应能力是怎样的？
     ▪ 技术
     ▪ 财务
     ▪ 知识
     o 如果一个工厂不遵从品牌政策会怎样？

4) 上文考虑内容
   • 你认为品牌政策在孟加拉国的上下文合适性是什么？
     o 制定政策时考虑到当地的上下文到什么程度？
     o 工厂对品牌政策在水管理实践在工厂水平的反应是怎样的？
     o 水管理政策如何影响孟加拉国的经济开发？

5) 希望一个利益相关者对话平台
   • 你认为希望一个利益相关者对话平台的前景是什么？
     o 不同的部门可以见面和联合讨论的水管理问题。
     o 这种平台以什么方式提高部门之间的管理能力并增加政策一致性？

面试指南（组织/协会）

1) 组织参与水资源问题
   • 组织在水管理问题上关注的焦点是什么？

Interview guide for organizations/association

1) 组织参与水资源问题
   • 组织在水资源管理问题上的焦点是什么？
What are the efforts made towards water management changes at the factory level by the different stakeholders?

2) **Policy coherency between government and brands**
   - What is the relationship between national legislation in water management and the policies implemented by brands?
     - Is there any risk of incoherency between the sectors?

3) **Policy implementation challenges**
   - What are the challenges of implementing new policy in the textile industry in Bangladesh?
     - What happens if a factory is non-compliant with the policies?

4) **Contextual considerations**
   - What do you perceive is the context appropriateness of the brand policy in Bangladesh?
     - To what extent is the local context considered when formulating policy in Bangladesh?
     - What is the factory reaction towards brand policy on water management practices at the factory level?
     - How could water management policy affect the economic development of Bangladesh?

5) **Prospect of a stakeholder dialogue platform**
   - What do you perceive is the prospect of implementing a stakeholder dialogue platform where the different sectors can meet and jointly discuss the water management issue in Bangladesh?
     - In what way could such a platform improve the management capacity between sectors and increase policy coherency?

**Interview guide for government department**

1) **Government engagement in the water issue**
   - Which are the foremost laws and regulations that relate to water management in the textile industry?
     - How do you enforce them at the factory level?

2) **Policy coherency between government and brands**
   - What is your perception of the policies implemented by brands in the textile industry?
     - Is there any risk for incoherency between the sectors?

3) **Policy implementation challenges**
   - What are the challenges of implementing new policy in the textile industry in Bangladesh?
     - What happens if a factory is non-compliant with the policies?

4) **Contextual considerations**
   - What do you perceive is the context appropriateness of the brand policy in Bangladesh?
o To what extent is the local context considered in the way the brands implement policy in Bangladesh?

o How could changes to water management policy affect the economic development of Bangladesh?

5) Prospect of a stakeholder dialogue platform

• What do you perceive is the prospect of implementing a stakeholder dialogue platform where the different sectors can meet and jointly discuss the water management issue in Bangladesh?

o In what way could such a platform improve the management capacity between sectors and increase policy coherency?