THE DEVELOPMENT OF WATER PRACTICES
WITHIN HOUSEHOLDS IN RIBÁUÊ, MOZAMBIQUE

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**ABSTRACT**

Within the academic discussion, water is argued to be a ‘multifaceted resource’, yet, the social and cultural dimensions of water have received little attention. Furthermore, authors have highlighted a need to explore the phenomenon from both, the macro and micro level, however, debates regarding water tend to revolve around the former.

Following the need for a more local perspective, this study looks into water practices of a household, like using a watering can to irrigate crops or purifying water for consumption, as well as the environment in which these occur. Recognising that change is essential for development, it also explores if improvement of these practices is needed, and how development of these, if so, may be encouraged.

One perspective fostering such an understanding is Symbolic Interactionism, focusing on individuals and their behaviour and how this is influenced by their perceived reality and the interaction with oneself and others. This perspective is utilised as the analytical framework in order to explore people’s lives and their experiences. The research was carried out as a field work during April and May, 2013, in Ribáuè, Mozambique.

This study concludes that there is a recognised need to develop water practices in order to support and create favourable outcomes for households. One of the factors that this study highlights as important is to acknowledge individuals’ cognitive process in relation to the visible actions performed, emphasising the significance of taking both processes into account when attempting to encourage the development of water practices. For instance, it is advisable to provide not only theoretical instructions, but also to demonstrate and let the individuals carry out new practices.

By taking such factors into account, this may strengthen the efforts to encourage a household to develop its water practices. This study also proposes potential perspectives for future research.

**Key Words:** Water Practices, Household, Development, Mozambique, Symbolic Interactionism.

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**Table of Contents**

- **Abstract** ........................................................................................................ ii
- **Acknowledgements** .................................................................................. iii
- **Table of Contents** ..................................................................................... iv
- **List of Figures** ............................................................................................ vi
- **Currency** ................................................................................................... vi

1. **Introduction** ................................................................................................. 1
   - 1.1 *The Research Topic* ............................................................................. 1
       The Research Problem .............................................................................. 1
       The Research Context ............................................................................. 3
   - 1.2 *Purpose Statement* ............................................................................. 4
       Research Objective .................................................................................. 4
       Research Questions ................................................................................ 5
   - 1.3 *Analytical Framework* ......................................................................... 5
   - 1.4 *Methodology* ....................................................................................... 6
   - 1.5 *Delimitations and Limitations* ............................................................. 6
   - 1.6 *Ethical Considerations* ........................................................................ 7
   - 1.7 *Disposition* .......................................................................................... 7

2. **Analytical Framework** ................................................................................ 8
   - Criticism of Symbolic Interactionism ......................................................... 13
   - Symbolic Interactionism within International Development Research .... 14

3. **Methodology** ............................................................................................... 16
   - 3.1 *Research Methods* ............................................................................. 17
       Sampling Techniques ............................................................................... 17
       Interviews ................................................................................................ 18
       Observations ............................................................................................ 19
       Sources .................................................................................................... 19

4. **Findings** ...................................................................................................... 22
   - 4.1 *Behaviour Around Water Practices* ..................................................... 22
       Water Usages for the Field ...................................................................... 22
       Water Usage within Animal Husbandry ............................................... 24
       Water Usage for Consumption ............................................................. 25
       Water Usages for Hygiene Purposes ...................................................... 27
       Labour Division of Tasks ...................................................................... 27
   - 4.2 *Interactions around Water Practices* ................................................... 28
       Interactions within the Household ......................................................... 28
       Interaction between the Household and the Community ...................... 29
       Interaction between the Household and the Public Sector .................... 31
       Interaction between the Household and the Civil Society ..................... 32
       Interaction between the Household and the Private Sector ................... 33
   - 4.3 *Behavioural Change around Water Practices* ...................................... 33
       Habits and Customs ............................................................................... 34
       Mentality of Household Members ....................................................... 34
**LIST OF FIGURES**

**Figure 1:**
The Most Prominent (Inter)Actions around Water Practices in Households within Ribáuê ........................................................................................................................................................................... 53

**CURRENCY**

*Currency Exchange Rate (1st of June 2013)*

<table>
<thead>
<tr>
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\(^1\) The official currency in Mozambique is Mozambican Metical (plural: Meticais).
1. INTRODUCTION

Within this chapter, an insight into the topic in focus is presented. An elaboration on the contemporary academic debate is provided, introducing the research problem, complemented by a description of the research context. In the following, the purpose statement of the study, including the objective and the research questions, is depicted. Furthermore, the analytical framework, applied within this study, Symbolic Interactionism, is briefly introduced. Subsequently, the chapter provides a brief description of the methodology as well as the research methods used within this research and concludes with an outlook of each chapter.

1.1 THE RESEARCH TOPIC

The Research Problem

Water is a crucial resource in many aspects. It is not only highlighted to be essential for human existence itself, but also for reducing poverty, food security (FAO Water, n.d.:6), public health, as well as economic growth, and is, therefore, strongly related, according to Massoud et. al. (2010:24), to ‘sustainable development’.

Despite great successes and progress, more than one billion people worldwide are still without access to safe drinking water (Massoud et.al., 2010:24; Gray/Stewart, 2009:1).

Yet, of all water consumed in the world, in most areas 70 to 80 percent is not for human consumption, but for agricultural production, including water practices like irrigating plants with a watering can or giving animals water to drink (Maxwell/Yates, 2011:54,56,68). Therefore, making water available for agricultural practices is also argued to be essential for the reduction of poverty and development, especially in rural areas (Cotula, 2008:5).

In relation to development, Todaro and Smith (2011:16) state that the development concept must “be conceived of as a multidimensional process involving major changes […] as well as the acceleration of economic growth, the reduction of inequality, and the eradication of poverty”. Thus, it is a compilation of change in the entire social system, adjusting to the individuals and social groups’ expectations and needs (Todaro/Smith, 2011:16).

In regards to water, the United Nations Development Programme (2006:v) sees that the issues within water can be “traced back to poverty, inequality, and unequal power relationships” and, additionally, argues that how water is managed needs to be changed. It further declares that human development is vital as it is about the fulfilment of individuals’ potential and, therefore, clean water is crucial to what people are able to do (UNDP, 2006:2).
Furthermore, FAO Water (n.d.:6) argues that those who need to have the major “say in how water is managed – and who know how it should be managed” are the people themselves.

However, contrary to the argument of taking the viewpoint of individuals, the dominant perception of water systems, as Mosse (2008:939-940) points out, is to see it as “bounded, knowable and separate from society” as well as to focus on the efficiency and maintenance of this resource. Consequently, this dominant view is missing social and political processes involved around water. He raises the point that research within water needs to move beyond the economic-technical domain, and should include the political sphere, cultural understandings, and social analyses. (Mosse, 2008:940)

In this regard, Oestigaard (2009:19) states that “[w]ater constitutes identities and creates societies in many different ways, both as symbols but also as a primary agency in culture.” Mehta (2000:11,16), in similarity to Mosse and Oestigaard, argues that water often has many meanings and symbolic, social, and cultural dimensions, though, she emphasises that global discourses and narratives often risk monopolising the debate and obscure such aspects. She highlights the need for increased attention to the ‘multifaceted resource’ of water, which “in the everyday contexts within which people live their lives […] has different faces and meanings” (Mehta, 2000:16).

As a result, studies looking at such processes have seemingly increased within the last decades. One example of taking social and cultural domains into account is Njoh’s study (2002:245-246), who looks into what needs to be taken into consideration, in addition to community involvement, in order to have successful developmental processes around water and argues that belief systems, among others, are important. However, this approach within water still appears to be under-researched.

Taking the statement of FAO Water (n.d.:6) into consideration, that those who should have the most say are the people themselves, it appears to be important to know what people actually think and how they act regarding water, also in order to understand the social environment that water is embedded in. Charon (2010:210) states that exploring how people define their own reality is key to comprehend human action. Yet, this seems to require a differentiation between individuals, as their situation and the environment they are situated in might be distinct as well.

Related to this view, Mehta (2000:16) emphasises that global discourses around water (currently, mainly focused around ‘water as a common good’, ‘water as an economic good’, or ‘water as a human right’) are often ‘normative’, ‘speculative’, and ‘rhetorical’ or even
“apolitical and divorced from socio-political realities.” Therefore, according to Mehta (2000:16), there is also a need for research across the realms of micro and macro levels of analysis. McIntyre (2006:45) raises that the tendency is to focus on only one of these perspectives, but that studying a phenomenon from both sides is essential. Persell (1990:23) also states that, in order to gain an accurate understanding of society, it requires a variety of approaches and levels of analysis to be employed. Many of the global debates focus on the physical attributes and, as such, it is highlighted that there is a necessity to, at the local level, look into “processes concerning decision-making, politics and the institutional organisation around water resources” as well as a need to explore how ‘different water users’ are looking upon their water situation (Mehta, 2000:16).

Therefore, taking local water users within a household as the level of analysis seems useful and within the context of development studies, Todaro and Smith (2011:219) argue that it is valuable to use the household level when studying, for example, ‘human development’. Looking at the household also appears to take factors into consideration, such as female- or child-headed households as well as gender-specific household tasks, which might be missed if focusing only on the individual level.

Consequently, combining these two arguments within the academic debate around water, taking social and cultural dimensions on a micro level into account, seems to provide a focal point and a distinct perspective for research that has, yet, not been explored to a great extent; especially in the context of gaining a further insight into water practices within a household. Exploring the practices utilised is central to holistically comprehend the environment around water that a household is embedded in, in the people’s view. As water is an important element for development and poverty reduction, this understanding can shed light on whether or not improvement, and thereby development, of certain practices may be needed and how this may be encouraged.

The Research Context

Following the water users in a household and the variety of usages and practices around this resource, it should also be highlighted that these are different from region to region, especially as the availability of water ‘varies dramatically’ (FAO Water, n.d.:3). One such case seems to be Mozambique, situated on the east coast of southern Africa (FAO, 2005:395), where droughts occur every three to four years, but people also face floods due to its geographical situation and location (World Bank et.al., 2009:1). With the focus on the water
situation that a household is located in, there are also great differences within the country as, for example, the climate and rainfall varies, especially between the inland and the coastal areas (FAO, 2005:395). Therefore, one non-coastal district, Ribáuè, which has distinctive characteristics, is the focus of the research in order to deepen the understanding of this environment.

Ribáuè, being part of the Nampula province, is considered to be rich in natural resources such as an abundance of rivers and water sources (DPOPH et.al., 2013:23). Yet, the district still faces challenges concerning water, for example, as there are still insufficient sources for drinkable water and the majority of the population is dependent on rainfall due to the traditional practice of rain-fed agriculture (DPOPH et.al., 2013:23,25).

1.2 PURPOSE STATEMENT

Research Objective

This study aims to give further insight in behavioural practices on a household level around water and to explore the environment in which these occur in the case of Ribáuè, Mozambique. By shedding light on existing water practices and the ‘social and cultural dimensions’ of the ‘multifaceted resource’ water, this research seeks to understand if improvement of these practices is needed, and how development of these, if so, may be encouraged. Highlighting the elements therein, the study strives to deepen the understanding of these processes around water and, thereby, contribute to the research focusing on such aspects.

Acknowledging that the social world is complex, the study is not attempting to state any cause and effect relations or isolate specific aspects, but rather to “identify factors without which the phenomenon does not occur” (O’Reilly, 2012:53).

In order to guide the research, analyse the findings, and to meet this objective, the following research questions are the basis of the study:
Research Questions

1. **What behaviours and interactions around water practices exist within and around a household?**

2. **What necessity to improve water practices can be recognised?**

3. **What does the environment look like in which the behavioural practices around water take place?**

4. **How can development of water practices within a household be encouraged?**

To get a deeper understanding of water practices within a household and to answer the research questions, one perspective that fosters such an approach is Symbolic Interactionism, which is introduced in the following section.

### 1.3 Analytical Framework

Symbolic Interactionism (SI) is a perspective developed in the late 1930s (Edgar/Sedgwick, 2008:347), which focuses on individuals and their behaviour and how this is influenced by their perceived reality and the interaction with oneself and others, aiming, as Charon (2010:209) highlights, to understand the nature of human life. It introduces the idea of meanings and symbols (Kendall, 2007:28; Andersen/Taylor, 2011:20), which implies the understanding a person has of an object (for example water) (Ritzer, 2011:371). Objects are everything that the world is made up of, but only through meanings and symbols can a person relate to these objects. Meanings of an object can also vary between different individuals and over time (Ritzer, 2011:370-72). These meanings arise through interaction, which “involves two or more actors engaged in a mutual social action” (Ritzer, 2011:372). These interactions and meanings also produce human action (also referred to as behaviour), which “involves a single actor” (Ritzer, 2011:372). Individuals are understood as ‘active, autonomous agents’ (Neubeck/Glasberg, 2005:18), but when acting, they also try to understand what others are doing and how to place one’s own action in relation to the other person’s behaviour.

Symbolic Interactionism also facilitates certain movement between the levels of analysis (Stryker, 1980, cited in Ritzer, 2011:387), taking mainly a micro perspective in order to “focus on the interaction of individuals and the context of those interactions” (McIntyre, 2006:44), but also considering the influence of organisational structures (Persell, 1990:21-22). In the analytical framework chapter, some further concepts are introduced to complement the aforementioned explanations, in order to analyse the findings of the research.
1.4 Methodology

This study is qualitatively designed, inspired by ethnographical studies, and embedded in a philosophical worldview of social constructivism. As McIntyre (2006:42) highlights, Symbolic Interactionism, being the analytical framework, is closely related to this worldview as both are interested in “how people construct their own social worlds”.

By aiming to enhance the understanding about how people in a household live their lives and how they organise and act in society (Mikkelsen, 2005:48-49) around water, this research is carried out as a field study.

For the purpose of collecting the respective data (Mikkelsen, 2005:49) a field work within the district of Ribáuè, Mozambique, was carried out during April and May, 2013. This field work was done by two researchers, being part of a group of seven students from the Linnaeus University in Växjö, Sweden. Within this research, observations were made and 67 semi-structured interviews were conducted with primary stakeholders, like families, and secondary stakeholders, for example, representatives of the public sector or the civil society.

1.5 Delimitations and Limitations

Within this study, one delimitation that can be recognised is to be part of a group of researchers. For logistical and administrative reasons, interviews were mostly held jointly and organised together. Therefore, the allocated time for each interview was partly restricted and, furthermore, there is a possibility that the interviewees were influenced by questions asked regarding other topics; yet, this also often provided insights stemming from other viewpoints.

One limitation of this research is the language obstacle since Macua and Portuguese, the languages in Ribáuè, are not spoken by the researchers. Interviews were conducted with the help of an interpreter, which might have impacted the validity and reliability of the data, but recognising this, further methods, like triangulation, were used, elaborated on in the methodology chapter.

Another limitation of carrying out this research was a ‘cultural barrier’, being conducted by two female researchers of European origin (Germany and Sweden), which might have influenced the understanding of the data and the African context. Yet, this could also be seen as an advantage, as having a diverse background might provide a different angle when looking at the topic in focus, embedded in its distinct context.
1.6 **Ethical Considerations**

Recognising the importance of taking ethical considerations into account, throughout the conduction of this field work one central facet was to inform the interviewees about the reason and purpose of the study. Personal information of the primary stakeholders as well as, if requested, the secondary stakeholders is, furthermore, treated as confidential.

1.7 **Disposition**

After having presented the research topic of the study, as well as the purpose statement, the following chapter introduces the analytical framework of Symbolic Interactionism in greater detail. It covers basic principles of SI, which raise seven main concepts that are used to analyse the data as well as a short historical account and an elaboration on the criticisms related to the SI perspective.

The third chapter elaborates on the methodology, which, apart from providing a depiction of how the analytical framework influences the design of the research, further describes and reviews the methods and tools used throughout the study. In addition, it also assesses the sources linked to the validity and the reliability of the research.

The fourth chapter, the findings, introduces the water practices and the levels of interactions that were identified through the research, in order to answer the first research question, as well as some contextual background. The chapter also looks at how behavioural change, in the interviewees’ perception, is possible.

Within the fifth chapter, the analysis is presented in three sections; the first analyses the necessity for the development of water practices with the intent to answer the second research question. The second section applies the seven SI concepts in order to answer the third and fourth research question, concerning the environment of water practices and how their development may be encouraged. The third section regards the utility of SI as an analytical framework.

The final chapter, the conclusion, is highlighting points that seem important in order to encourage the development of water practices within a household, emphasising the need to take the concept of ‘covert and overt behaviour’ into account while exploring such processes. Furthermore, the value of researching the social and cultural dimensions of water on a local level within this study is underlined.

In addition, a list of the interviews and a glossary, explaining terms and concepts used, are provided as appendices after the list of references.
2. Analytical Framework

This chapter introduces the analytical framework applied within this study, Symbolic Interactionism, by outlining the main principles of this perspective. This is followed by an elaboration on the seven concepts of Symbolic Interactionism that are the basis for the analysis of the findings. Furthermore, a critical assessment of the framework, presented within the academic debate, and how these points are recognised within this research is provided. The chapter concludes with a brief literature review of Symbolic Interactionism’s application within international development research.

Symbolic Interactionism (SI) did not become institutionalised until the 1970s (Plummer, 2000:203) but, as Fine (1993:80) highlights, the framework has gradually been acknowledged since the 1990s; mainly applied in studies regarding social work, education, nursing, and theatre arts (Fine, 1993:80).

Within Symbolic Interactionism it is recognised that there are significant differences between the authors and their principles (Ritzer, 2011:369) and, as Plummer (2000:196-197) mentions, it may be difficult to not be selective and partial when unfolding the framework and its history. Nevertheless, it is generally agreed upon that the origins of SI can be traced back to the philosopher George Herbert Mead in the 1920s and that the term ‘Symbolic Interactionism’ was coined by one of his students, the sociologist Herbert Blumer in 1937 (Edgar/Sedgwick, 2008:347; Charon, 2010:29; Plummer, 2000:196). Blumer, besides building on his professor’s work, was also inspired by other sociologists as, for example, William James, Charles Peirce, William I. Thomas, and Charles Horton Cooley (Charon, 2010:29).

In order to ensure coherence throughout this study and to facilitate the application of the framework within the analysis, the basic principles of SI described by George Ritzer (2011:369) are serving as the guidelines. Out of these basic principles, seven key concepts (emphasised below) are identified by the researchers to be central to explore the water practices of households in Ribáuè, their potential development and how this can be encouraged, and the environment in which these are taking place.
The basic principles presented by Ritzer (2011:369), who takes into consideration many of the main concepts and authors within SI, are introduced below, and subsequently explained:

1. “Human beings, unlike lower animals, are endowed with the capacity for thought.
2. The capacity for thought is shaped by social interaction.
3. In social interaction people learn the meanings and the symbols that allow them to exercise their distinctively human capacity for thought.
4. Meanings and symbols allow people to carry on distinctively human action and interaction.
5. People are able to modify or alter the meanings and symbols that they use in action and interaction on the basis of their interpretation of the situation.
6. People are able to make these modifications and alteration because, in part, of their ability to interact with themselves, which allows them to examine possible courses of action, assess their relative advantages and disadvantages, and then choose one.
7. The intertwined patterns of action and interaction make up groups and societies.” (Ritzer, 2011:369, emphasis added).

The first principle, regards the capacity for thought (Ritzer, 2011:369), which sees humans as ‘reflective’ and ‘interacting’ entities, rather than confined by a structure or compelled by “external or internal forces beyond their control” (Meltzer/Petras/Reynolds, 1975, cited in Ritzer, 2011:369). This is an assumption underlining the whole theory behind Symbolic Interactionism. The mind of a human is central to SI and is seen as a never ending process of stimuli and responses. A person’s mind, including the ability to think, arises from interaction. (Ritzer, 2011:369-370)

Ritzer’s second principle regards the process of such interaction. This is the process by which thought is ‘developed and expressed’ (Ritzer, 2011:370) and in which individuals get educated in the ‘values and norms’ within their environment, learning, for example, ‘to behave’ or “what to expect of others” (Neubeck/Glasberg, 2005:145).

Hence, interaction is influenced by the individual’s thinking process in that one decides how to act in accordance with others’ activities. Individuals have ‘experiences’, ‘needs’, and ‘intentions’, which are mixed together in encounters with other individuals, creating new unpredictable shared experiences. Interaction is also occurring with silent or seemingly
inactive individuals as this silence or inactivity can impact the behaviour of others. (Layder, 2006:79)

One form of interaction is socialisation, a ‘dynamic process’ that forms and improves the capacity for thought. Socialisation within SI is seen as a two way process in which people obtain information, but also where this information is shaped and adjusted by the individual; according to one’s specific needs (Ritzer, 2011:370).

In SI, the thinking process revolves around objects (Ritzer, 2011:370), which, as Blumer (1969:11) raises, are “anything that can be indicated or referred to”. He divides them into three categories: physical, social, and abstract objects. The first includes things like a tree or a chair, the second, for example, a mother or a president, and the third refers to, among others, moral principles or ideas (Blumer, 1969:10-11). These are not interlinked, but one object can be placed into more than one category related to its meanings, for example, a flower can be seen as a physical object, ‘being a plant’, but can also be seen as an abstract object, “something to send to a loved one” (Charon, 2010:45-46). These meanings of objects arise from interactions and the capacity for thought, but the meaning can be different for all people, as individuals have unique combinations of socialisation processes and capacity for thought. Blumer (1969:11) states that “[t]he nature of an object – of any and every object – consists of the meaning that it has for the person for whom it is an object.” People’s action and interactions are based solely on the individual’s recognised and known objects and their meanings, and, therefore, neighbours could identify with a certain situation differently, despite living in the same immediate surroundings. This has the potential to give rise to miscommunication and tensions, but it does not have to be conflictual because it is also possible to have common meanings within a set group of people, where objects obtain the same meaning through a process of interaction. (Blumer, 1969:11)

Therefore, the third principle concerns meanings and symbols. A person’s behaviour and response towards an object are influenced by the meanings the object holds: the understanding a person has of it (Layder, 2006:74; Hughes/Kroehler, 2005:22). These meanings stem from interaction and are modified through interpretation and, therefore, not originating or inherent in the object itself (Layder, 2006:74). “Meaning […] holds people together socially” (Layder, 2006:75) and is what provides space for actions of cooperation or conflict. An encounter may either be ‘smooth’ or ‘disruptive’, depending on a person’s understanding of the situation. Because of the constant interaction, meanings that are shared among groups of people are continually changing and created (Layder, 2006:75).
In this context, Andersen and Taylor (2011:20) provide a helpful example by looking at young people smoking cigarettes. Despite being well informed and knowing the dangers, many nevertheless smoke because of the constructed ideal and the positive image that smoking lets them identify with; such as ‘being cool’. Therefore, the meaning given to the idea of smoking “overrides the actual facts regarding smoking and risk” (Andersen/Taylor, 2011:20). SI perceives ‘the world’ as a ‘constructed reality’ as people intervene and understand it with the meanings and symbols that they know and recognise (Hughes/Kroehler, 2005:22).

Symbols are key in order to help individuals to draw “meanings from social situations” (Kendall, 2007:28). They are “used to represent (to stand for, to take the place of, to refer to something), whatever people agree they should represent” (Charon, 2010:49). Symbols are socially produced through interaction, intentionally utilised, and those who are using them are aware of their meaning (Charon, 2010:46). A horse, for example, is not a symbol in itself, but can also be utilised as such with the purpose of portraying a certain image, such as wealth (Charon, 2010:49).

Symbols are part of, and exchanged among people through interaction, in which individuals search for ‘clues’ on appropriate behaviour and how to understand what the others do (Giddens et.al., 2008:15; Henslin, 2006:12). One example is presented in Curry’s study about a wrestler’s understanding (perceived meaning) of pain. The definition of pain, at first, was a symbol of masculinity, but throughout his career he became increasingly influenced by his profession as well as interacting within that environment. Consequently, the meaning of pain shifted accordingly to represent something that was part of being a wrestler and gave no special respect. (Curry, 1993:286-288)

In addition, language is seen as a great ‘system of symbols’ as words represent things and makes all ‘other symbols possible’ (Ritzer, 2011:371). Objects and behaviour, as well as their meanings, exist only because they are and can be explained through language. Language, therefore, also develops an individual’s ability to think, which occurs as a type of interaction with oneself (Ritzer, 2011:371).

Principle four focuses on human action in terms of covert and overt behaviour (Ritzer, 2011:372). The former refers to the thinking process before an act, and therefore without any action taken, whereas the latter is the action performed. The most common form of behaviour is a mixture of both, but overt behaviour can also take place without the input of covert behaviour, such as habitual practices occurring out of routine or natural reflex (Ritzer,
Overt behaviour can be seen as a ‘stream of actions’, ‘constantly changing direction’ as we interact and respond (Charon, 2010:115-116). However, humans simultaneously engage in another stream of behaviour, covert, a constant internal discussion. These two streams are influencing each other and their direction is actively managed by the individual and is not a passive response to the environment (Charon, 2010:116). Furthermore, as stated before, behaviour and thought are shaped by interaction as individuals reflect on the action of others (Kendall, 2007:29).

Principle five concerns the definition of the situation, which was developed by Thomas and Thomas (Ritzer, 2011:373). The Thomas theorem states that “[i]f men define situations as real, they are real in their consequences” (Thomas/Thomas, 1928, cited in Ritzer, 2011:373; Hughes/Kroehler, 2005:81). Thus, people behave according to the world they have defined. Charon (2010:125) exemplifies that “it does not matter if you are a scoundrel or not; what matters is that I see you as a scoundrel and I act toward you as if you were one.” It is acknowledged that society, especially the community and the family, provides most of the definitions, yet, the possibility of individuals to spontaneously define their situation has also been raised (Ritzer, 2011:373). Using the definition of the situation, people have some autonomy and are “capable of making unique and independent choices” (Ritzer, 2011:373). Individuals are not necessarily ‘constrained’ or ‘determined’, despite influenced by interaction, because they have the capacity for thought, thus being reflective. Therefore, they have no requirement to “accept meanings and symbols that are imposed” upon them (Ritzer, 2011:372-373). Consequences of one’s behaviour, following a certain definition of situation, can also lead to this definition to become a ‘self-fulfilling prophecy’. In this case, the definition causes actions that ultimately create structures strengthening the definition, such as laws and norms reinforcing beliefs of racial inferiority (Hughes/Kroehler, 2005:81). Furthermore, there can also be shared definitions of situations (or ‘culture’), which are transmitted and taught to members of a society through socialisation (Hughes/Kroehler, 2005:81).

Ritzer’s sixth principle raises the concept of the self (Ritzer, 2011:373). Cooley developed the idea of a ‘looking-glass self’ where an individual thinks about how she or he appears to others, considers how that appearance might be perceived and, consequently, develops a feeling toward the self, like pride or mortification. As such, individuals can behave with others or toward oneself based on this view (Ritzer, 2011:373). In addition, an idea developed
by Mead points out tensions and social constraints between the two ‘selves’, referred to the ‘I’ versus the ‘me’, which arise from the difference between what we would like to do (I or ‘our all-too-human selves’) and what we are expected to do (me or ‘our socialized selves’) (Ritzer, 2011:375).

The seventh, and final principle, presents the view on society (Ritzer, 2011:382). Besides that SI concentrates on social phenomena on a micro level and is mainly concerned with how individuals understand and create the world they live in (Edgar/Sedgwick, 2008:347; Kendall, 2007:28), it further presents a view of society. This view differentiates itself from the macro structures, as “[t]he essence of society is to be found in actors and action” (Ritzer, 2011:383). Charon (2010:153) argues that actors through interaction create a society where geographical unity is not needed, but which “ends without social interaction” (Charon, 2010:153). Furthermore, behaviour can also be collective as people take others into account when deciding on an act. The actions are ‘intertwined’, yet independent, in the sense that one’s behaviour matters to others although it might not be ‘imitated’ (Charon, 2010:153). Hughes and Kroehler (2005:23) emphasise that “[w]e are at least as likely to shape ‘social structure’ as to be shaped by it”.

Following these principles of SI, the findings, as explained above, are analysed based on the concepts of i) capacity for thought, ii) interaction (including socialisation and objects), iii) meanings and symbols (and language), iv) covert and overt behaviour, v) the definition of the situation, vi) the self, and vii) the society.

**Criticism of Symbolic Interactionism**

Within recent literature, SI as a theoretical framework has been criticised mostly regarding its argued failure “to take full account of power relations” (Edgar/Sedgwick, 2008:349). For example, providing only an insufficient assessment of such, not taking class dominated structures or individuals in power into consideration (Denzin, 1992:57). Yet, Dennis and Martin (2005:194-195) argue that SI can and does give an understanding of this issue, but they highlight that the criticism often misses that the understanding that SI provides is based on its underlying theoretical assumptions of human nature and, hence, is not necessarily inferior to other perspectives.
Layder (2006:90) also argues that it is ‘inaccurate’ to say that the framework does not take “power, inequality, and conflict in society” into consideration. However, having the focus on the ‘localised, face-to-face issues’, he states that, SI ‘underplays’ the relationship between these and the wider structures (Layder, 2006:90). Nevertheless, in this research a structural presence could be recognised, being present in the following chapters. For example, as individuals are part of societal structures, reflecting and acting on these through the capacity for thought as well as interaction processes, it could be argued that this wider structure is implicitly represented in the individual’s views and, consequently, part of this research. Hence, although looking into these structures is not the aim of the study, Symbolic Interactionism as a framework seems to have potential to also explore more than micro-structures, partly restricting the criticism on this point.

Seeking to look into the water practices within a household and how development occurs and may be encouraged, SI still seems to be ideal as the analytical framework for such a study due to its strength, following Hughes and Kroehler’s (2005:23) argument, to “get inside people’s heads’ and view the ‘world’ as it is seen, interpreted, acted upon, and shaped by the people themselves”. In addition, as Symbolic Interactionism is mainly concerned with the empirical investigations from ‘the natural world’ as a basis for interpretation and analysis, applying SI to a field work appears appropriate (Blumer, 1969:47-48).

In addition, besides being mainly used, for example, within social work and theatre arts (Fine, 1993:80), SI has, as presented in the following, also been applied in the field of development research; yet, is seemingly still undervalued in such studies.

**Symbolic Interactionism within International Development Research**

Within international development research, in which this study is embedded, there appears to be a limited amount of studies applying Symbolic Interactionism. One study that applies SI is carried out by Jaklič (2004:110-111,126), who looks at socio-economic development, in terms of the relative success of Slovenia’s earlier economy, and adapts this framework in order to understand various actors’ interaction strategies. He finds that SI as a research framework gave ‘deeper insights’ into aspects of development processes, such as the inner logic of the business system in Slovenia and that this understanding could help actors to avoid implementing poor policies (Jaklič, 2004:126).

In addition, Chang (2000:223-224) applies a modified macro-SI framework to look at structural conditions and power in China and the influence that ‘meanings’ had on an
economic reform. He writes that his most important finding “is that interpretation/meaning is […] a major factor that has contributed to China’s reform […]” (Chang, 2000:246). For example, one interpretation that was relevant is the reformer’s “definition of reform orientation” and what understanding the Chinese people, of different societal groups, had of the reformer’s consequent policies (Chang, 2000:246).

Moreover, Rao (2005:22) looks at local development in India and Indonesia, and highlights that symbolic meaning of public goods can help to understand the workings of communities and how to improve public services. The countries in focus, he argues, should try to build on these goods in order to obtain a more “effective, and equitable, local development” (Rao, 2005:2,22).
3. Methodology

This chapter is providing a review of the methodological approach of this qualitative and interpretative study and the research methods applied, starting with an overview of the setting in which it was carried out - the district of Ribáuè in Mozambique. Furthermore, the methods of sampling, interviews, and observations as well as their utility for this research are assessed. In the following, an insight of the sources employed in this study is presented.

This qualitative field study is ethnographically inspired and is, thereby, looking into the social everyday life, how it unfolds, and the context in which people act and interact (O’Reilly, 2012:3) around water practices. This is carried out as a field work in Ribáuè, a district in northern Mozambique.

Ribáuè had an estimated population of 236,961 inhabitants in 2012 (SDSMAS, 2013:2) and the great majority of the population is occupied within the agricultural sector (MAE, 2005:39), predominantly with small-scale rain-fed agriculture. The common household within Ribáuè consists of three to five members, and 42% of the households are nuclear families (MAE, 2005:11). Taking a closer look at the characteristics of Ribáuè, it is argued that different areas can be categorised under ‘urban’ and ‘rural’, but some are also perceived to be ‘peri-urban’ communities (DPOPH et.al., 2013:37,73). The district of Ribáuè has a humid tropical climate, with two main seasons: the dry season without rainfall (May to November) and the rainy season (December to May) (DPOPH et.al., 2013:36-37). Besides other sources of water, the 2013 coverage of clean drinking water, provided by boreholes, is stated to be 50.01% (SDPI Ribáuè, 2013:2-3). Taking these conditions into consideration, and focusing on individual’s behaviour around water usages, exploring the water situation of Ribáuè and the households therein appeared to be suitable for such a research.

The analytical framework, Symbolic Interactionism, used to try to get a deeper understanding of water practices in households, is an interpretative approach (O’Reilly, 2012:54), which ought to be perceived as the underlying notion of this study; influencing the design of the research. Therefore, SI is present throughout the research. Moreover, the framework is applied to analyse the findings, using the seven concepts identified in the previous chapter and is guiding the data collection process, the formulation of the research questions, as well as the presentation of the findings. How the application of the analytical
framework is influencing the conduction of this research is elaborated on throughout the respective sections below.

Furthermore, taking the rational of interpretative studies into account - *hermeneutics* (Mikkelsen, 2005:126) - this study is also acknowledging that the researchers, being ‘members’ of a certain perceived reality are, thus, influenced accordingly (Alvesson/Sköldberg, 2000:57). The circle of alethic hermeneutics creates a relation between pre-understanding and understanding (Alvesson/Sköldberg, 2000:56-57) and, during the field study, the researchers were affected by having pre-understandings, based on background, experiences, and the initial research, which was built upon while carrying out the field work. As a result, more insight was continuously gained shaping the (pre-)understanding of the situation. Exploring and learning more about the processes in focus, by participating within and observing the context in which people’s everyday life is embedded, also a central facet of ethnography (O’Reilly, 2012:86), the understanding acquired was continuously modified by new information during the field work, which is presented within the findings.

### 3.1 Research Methods

As stated above, this research is inspired by the ethnographic approach and is guided by the selected analytical framework, SI, which, according to Kendall (2007:30), is both a “theoretical perspective and specific research methods” and, therefore, the methods used within this study are linked to these two elements.

**Sampling Techniques**

In order to gain access to the interviewees and their respective knowledge, different kinds of sampling techniques, commonly used in ethnographical studies, were applied throughout the field work in Ribáuè.

One of such a technique, known as *snowball sampling* (O’Reilly, 2012:44), was the use of ‘initial contacts’ to get in touch with further interviewees perceived, by either the researchers or the interviewees, to be important to talk to. Yet, O’Reilly (2012:44) highlights that this technique also entails the risk of overlooking certain groups, which seemed to be a factor that had to be taken into consideration within the research. Although acknowledging the distinct features of a qualitative study, not aiming to represent the population of Ribáuè as a whole, it was still perceived to be difficult to gain information from individuals who were not part of any organised structure, which is further elaborated on at the end of this chapter.
Therefore, another technique, occasionally used, was to seek the opportunity, which O’Reilly (2012:44) describes as convenience sampling, especially in cases when, for example, the researchers arranged other interviews or exploring an area. Although being criticised as being an ‘unavoidable fact’ rather than a legitimate method (O’Reilly, 2012:44-45), approaching certain individuals or groups, for example some standing around a borehole, often resulted in introducing the researchers to the community, or opened the possibility for an interview (at a later time).

Furthermore, purposive sampling, a technique used to “access people, times, settings or situations that are representative of given criteria” (O’Reilly, 2012:44) seemed to be an appropriate approach, especially relevant toward the end of the field work. Within the last week in Ribáuè, it was perceived to be necessary to gain access to certain individuals or groups of interviewees that were understood as central to complement to the researcher’s experiences and findings, at that point.

**Interviews**

Using the method of conducting a field work, as previously explained, one common instrument of such is to apply semi-structured interviews with open-ended questions (Kendall, 2007:30; Mikkelsen, 2005:169). This was perceived as a useful tool, especially as it allowed the interviewees to share experiences and views of the water situation in Ribáuè, which a common household is facing, as well as to give an insight of the water practices, fostering the researchers understanding of the processes in focus.

By seeking to explore how an individual perceives its environment and acts upon it, in regard to the water usages, questions concerning behaviours and interactions were developed as part of an interview template. This was used to guide the interviews to moderately facilitate “the organization and analysis of the data” (Mikkelsen, 2005:172) and to assure a deep understanding of such processes.

In total, 67 interviews were conducted, out of which approximately one third of the interviewees were women. These interviewees were individuals, such as mothers, key informants, especially within the education and health sector, and groups, mainly consisting of women or youth as well as organised entities like associations or committees, following the classification introduced by Mikkelsen (2005:172-173). As touched upon before, in order to ‘get into people’s heads’, the focus was on the families and community members, hereby
referred to as primary stakeholders. Moreover, it also seemed necessary to include secondary stakeholders within the sample, such as individuals or groups working with the community, in order to get a deeper understanding of the environment households in Ribáuè are situated in.

**Observations**

Besides carrying out interviews, observations were conducted, being a prime method of ethnographic studies (O’Reilly, 2012:86) as well as SI (Ritzer, 2007:136; Plummer, 2000:200) as they provide a “detailed recording of everyday life” (Edgar/Sedgwick 2008:347).

Applying McIntyre’s (2006:85) categorisation of observers, in this study the researchers were, to a degree, complete participants and, to a greater extent, participant observers. The former is a researcher who does not inform the individuals that they are part of a research (McIntyre, 2006:85), which occurred by being part of the life in Ribáuè as, for example, going to the market. The latter type of observer is open about doing research so that, consequently, the individuals and groups are aware of that they are ‘being studied’ (McIntyre, 2006:85), which was applied in all interviews. Taking the role of these two types of researchers was perceived as beneficial for the comprehension of the processes being studied. This was carried out in order to obtain a better picture of the situation in Ribáuè and to foster an understanding of the answers and explanations provided by the interviewees; for example recognising the situation around a borehole.

Therefore, using the method of observation was a valuable tool, especially focusing on the household and its actions around the water usages, acknowledging that some information is vital for the researchers to see and experience.

**Sources**

Seeking to understand water practices, the primary source has been the conducted interviews, both with interviewees in the community and the people teaching and working with this level. Within this research, it is also perceived that the arguments presented by the people about their lives, including secondary stakeholders talking about their livelihood, are primary sources, providing the core information for this research.

In addition, secondary sources were utilised, perceived as complimentary to answer the questions raised within this research. On the one hand, information provided by the interviewees about other individuals or groups was used, and on the other hand, the
observations obtained, as well as documents and reports, were consulted in order to complement the data.

As O’Reilly (2012:187) argues, analysing the data gained from different sources is, to a certain degree, sorting when categorising the information in the most suitable manner in order to, within this study, explore the water practices and the potential development of such within households in Ribáuè. The analytical framework influenced this process, as organising the obtained information followed, mainly, behaviour and interaction.

In order to “validate the observations and information” obtained, triangulation of the data, the investigator, and the methodology was applied, aiming to take different points of views into account regarding the same ‘thing’ (Mikkelsen, 2005:96-97). Using data triangulation within this study, following the categorisation of Mikkelsen (2005:96), space and person triangulation were applied. The former was used by visiting several communities within the district of Ribáuè in order to get a more accurate picture of the situation and the latter was utilised by conducting interviews with different levels of clusters of society; talking to individuals as well as groups. Being carried out by a team of two researchers, this study benefits from being explored by more than one investigator (Mikkelsen, 2005:96), having different European origin and educational background. Applying the last triangulation type within this study, methodological triangulation, different methods were conducted (between-method), but the same methods were also applied in different situations (within-method) (Mikkelsen, 2005:97), contributing to the validation of the information presented and analysed within this research.

These triangulation methods also foster the validity and reliability of this study, both of which are subsequently described.

Validity

Taking the validity of this study into account, which implies that the research should measure “what it intended to measure”, having, for example, “enough evidence to support the argument” (O’Reilly, 2012:226; Mikkelsen, 2005:195), one of the issues of conducting the interviews in this research should be further examined, namely, the imbalance of interviews in favour of the secondary stakeholders. This could be seen as problematic since this study is seeking to explore the individual in its social environment, using the analytical framework of SI, and, therefore, the primary stakeholder should be the focus. However, as this research is a
qualitative study, not trying to replicate causes and effects, the information gained from a limited number of primary stakeholder interviewees is sufficient to make a valuable analysis of such processes within Ribâuè. This is especially relevant when taking O’Reilly’s (2012:227) argument into consideration that one essential criterion for validity in ethnographic studies is to focus on the contact with the ‘human agents’, which is the core element of field work and part of this study’s objective. Furthermore, secondary stakeholders have been perceived as useful in order to provide essential contextual understanding.

Moreover, seeking to ensure valuable research, this study aims to introduce the individual’s precise statement and intended, contextual message, acknowledging that these are based on their reality, introduced by Aspers (2007:41) as the first-order constructions. Applying the analytical framework of SI on these, in order to answer the research questions and understand the processes at hand, the researchers create second-order constructions as well as analyse and present only the data, perceived as relevant in light of the findings (Aspers, 2007:41-43). However, this interpretation and analysis is underpinned by the people’s own explanations of their reality, creating an important relation between the first- and second-order constructions.

**Reliability**

Mikkelsen (2005:195-197) states that using the same techniques and methods within the same conditions will result in identical outcomes, which is an indicator of reliable research. Yet, by being part of a group of researchers with a variety of topics, the possibility of later establishing the same conditions seems to be limited if based solely on the approach and research design presented in this study. However, in order to strengthen the research’s reliability, transparency regarding the methods applied and their assessment was central.

Following an interpretative approach as outlined above, the role of the researcher, being part of the study, having values and subjective experiences, should be mentioned (Creswell, 2009:8,17). By recognising and acknowledging the researchers background and personality and by thinking ‘critically’ and ‘reflexively’, this study is taking advantage of such experiences, producing a valuable research (O’Reilly, 2012:222,228).
4. FINDINGS

This chapter is presenting the findings, embedded in a description of the context, as argued by the interviewees and as observed, which is providing the basis for the analysis in the next chapter. These findings are organised to answer the first research question about the behaviour around water practices and how these are carried out and the interactions recognised in Ribáuè within and around households. Subsequently, factors that may hinder or encourage development regarding water practices, raised by interviewees on the household level as well as people working with the community, are outlined.

4.1 BEHAVIOUR AROUND WATER PRACTICES

Within the field of water, usages presented in the interviews were categorised by the researchers in four types, water for the field, animal husbandry, consumption, and hygiene purposes. Each usage entails several water practices on a household level, which are subsequently presented, followed by a depiction of the labour division of carrying out these practices.

Water Usages for the Field

Within Ribáuè, the large majority of the population are small-scale farmers, relying on rain-fed agriculture. As emphasised by many interviewees within the community as well as staff working with it, an individual in Mozambique is first and foremost a farmer, even if this person has an additional income; it is seen as part of one’s life rather than a ‘career option’. Agricultural production carried out on the fields by the household members provides the yearly food supply and also, at times, results in additional income for the household if there is a surplus to sell. Yet, many farmers produce only enough to sustain their household, if even, until the next harvest.

In general it was stated, by both individuals within the community and interviewees working with it, that, in order to make use of rainfall, farmers need to prepare their fields

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2 In order to provide the most accurate picture of the arguments introduced by the interviewees, and in relation to the two categories of stakeholders in this study, the interviewees are presented indicating their background, such as living within a community in Ribáuè (all of which are referred to as ‘the community’), working with ‘the community’, their affiliation to a specific level of society, or being employed within a distinct sector.

3 The main food crops that are produced in Ribáuè, as explained by the interviewees within and outside the community, are maize, cassava, sorghum, several types of beans, and various vegetables, such as onion, cabbage, and tomato.
early. Interviewees within the community, as well as some teaching agricultural practices, mentioned that it is necessary to do this, and to sow the seeds before the first rainfall, in order to benefit from the water. They raise that, lately, it has become more difficult to plan the production as it is no longer possible to use the rain calendar as before due to the increased irregularities of the rainfall. It was explained that the problematic of this is that the seeds may die if the time between sowing and the first rainfall is very long, but too much rain can also destroy the crops. The latter also has further consequences as heavy rains, exemplified by an interviewee within the sector of infrastructure, can cause severe problems for the population as roads and bridges are destroyed. This negatively impacts, among other things, access to markets where farmers can sell their produce or the access to schools and hospitals, a phenomenon, according to this interviewee, increasingly present in Ribáuè.

Despite that rain also has damaging effects for farmers, one interviewee teaching agricultural practices highlighted that, in this situation, one can, at least, make use of the excess water for new or other crops when it is not raining, as a type of irrigation method. Being influenced by the rainy and dry season, several interviewees working in the agricultural sector highlighted the need to introduce new technologies to improve water practices for the field, such as irrigation.

Although limited, some farmers in Ribáuè are using this practice since it, ideally, as explained by both farmers and other actors, allows for production of vegetables all year round. Some more engaged in these practices, described irrigation tools as a way to develop their economic activities or plainly as ‘indispensible’. One local trader further explained that it is good business as the demand for vegetables is high and, consequently, profitable, especially as there is a low production of vegetables in the northern part of the country. Both, farmers associations and individuals, mentioned that they have introduced irrigation and a common experience among them is that this type of activity is rewarding; yet the methods of this practice presented within the interviews varied.

The most common way, as explained by a member of a farmers association as well as family interviewees, is to irrigate manually, using a watering can with water from the river or having fields close to the river. Some households and farmers associations explained that they use irrigation through a gravitational system, with furrows dug throughout the inclined fields where water, coming from the river, can run through. However, sometimes during the dry season the river dries out and, consequently, many stop irrigating all together. The least common method within Ribáuè, as few small-scale farmers have access to these tools due to a
lack of resources, is to have other irrigation installations, such as water tanks or dams. These are used in order to accumulate water, which can allow irrigation also when the river is dry, and a few have pumps, mainly running on diesel, as a complement in order to transport water from a river to these infrastructures. Yet, it is raised by people working with the community, as well as a farmer, that watering vegetable crops too much leads to the destruction of these, which also makes it problematic to produce during the rainy season.

**Water Usage within Animal Husbandry**

The second usage of water is for the breeding of animals. Within Ribáuè, mentioned throughout the interviews on all levels, the most common animal within a household is chicken, but other animals were also presented, such as goats, doves, rabbits, or pigs. Having cattle is not common in Ribáuè, as explained by one interviewee introducing animal husbandry to the community.

As further described, chickens are often seen as an investment for households, a ‘living bank’ (account) and, therefore, a common animal to own. It was raised by families as well as people working within the community that animals can improve the economic situation of the household and, for example, solve financial problems in emergencies, such as to pay for medicines.

When it comes to giving animals water, as presented by a technician responsible for animal breeding, the practice often depends on the animal. Farmers tend to take larger animals to the river to drink whereas smaller animals are usually brought water directly, the latter practice was also mentioned by people in the community. However, interviewees working with the community pointed out that the water that the animals are given or taken to is not always clean, which can provoke diseases with severe consequences, like less produce or death of the animal.

Furthermore, it has been acknowledged by interviewees in the public sector as well as the civil society that being an owner of animals also supports a family’s food security and can improve the diet, especially in regards to animal protein. One approach to promote this feature of the diet, described by several interviewees introducing such practices to the community, is to expand fish breeding within the country; especially as only little fresh fish is available in Ribáuè due to its distance from the coast.

Furthermore, one fish breeder raised that this new activity, as asserted by those introducing the option to him, has had a positive impact on the household income and was the reason as to why he started it. It was explained by some introducing this practice, that fish breeding in
Ribáuè has been easier to implement than in other places due to the ecological situation in the district; having access to water sources such as rivers. The main requirement, apart from the initial fish, is only a large hole, called a ‘tank’, to be dug near a water source.

**Water Usage for Consumption**

One of the findings in this study was that, regardless of their background, all of the interviewees stated that they only drink clean water, and, furthermore, they believe that the majority of people understand the importance of it. When asking about what kind of water sources people have access to, some different types were mentioned. The majority of the family interviewees explained that they manually open small wells in river banks to access water. However, the interviewees within the community, who had close access to a borehole, stated that they go there to get their drinking water.

After fetching the water at either the borehole or well, as explained by the large majority of interviewees and as observed, the method of transport and storage varies within the community. As described by the same group of interviewees, a common way of transporting water in the past was to put leaves at the top of the filled bucket in order to avoid spillage and to store it without any precautions; a practice which could pollute the water in the process. Nowadays, they state that more people are transporting the water in a clean recipient, which is possible to close and storing it covered in a place that is considered to be safe, recognising that not doing so causes contamination of the water.

Due to the perceived risk of contaminating the water through poor practices of transport and storage, all of the interviewees, on different levels of society, were highlighting different methods of purifying water. This was also raised, by the same interviewees, to be important in relation to the use of certain sources of water. The river was often argued to be unsafe due to particles and microbes, whereas the borehole is meant to have clean water provided directly from the ground water. It was stated by these interviewees that if not treating the water that is considered to be of poor quality, there are severe consequences such as falling ill with diarrhoea or cholera. Being sick, as explained by these interviewees, results in, for example, not being able to go to the fields, or not, being younger, going to school.

One method that interviewees mentioned is to boil water. Some women stated that this way of treating water is time consuming, as it needs time to not only boil but also to cool down.
Besides this argument, a variety of interviewees within the community as well as working with it, explained that boiling the water also entails an advantage, as the only resource needed is firewood, also used for cooking. Yet, some women mentioned that it is increasingly difficult to get it within their area, now having to walk further into the mountains or forest.

Besides boiling, some individuals also mentioned that they filter the water with a clean cloth, which is called capulana in Mozambique. This is mainly done for river water, which is often full of particles, such as sand, leaves, and soil. Within statements regarding this method, some contradictions were recognised among the interviewees within the community. While some explained that this is just to get rid of the dirt to later treat the water with an additional method, like boiling, others said that filtering is enough in order to drink the water.

Another commonly known possibility to purify the water, mentioned by the great majority of the interviewees, is the use of ‘Certeza’, a chemical product that is available either at the market or occasionally for free through the health services or organisations working within the district. Yet, for the former it was raised by the community as well as observed on the market, that this product is often unavailable. One small bottle costs on average 15 Meticais, yet the understanding of how much water this would purify varied among the interviewees. When discussing this method with the family interviewees as well as staff working with the community, the majority raised that the average household cannot afford to buy this product. Besides ‘Certeza’, another chemical product that is used to purify water is chlorine, which is also known within the district under the brand name ‘Javel’, mainly raised by interviewees in the public sector and civil society actors.

Although having the knowledge of one or more of these methods, it was often stated by the local population as well as those working in the community, that many (other) households would not treat their water, even when taken from the river. In contrast, some family interviewees mentioned that they are even treating the water coming from the borehole to be assured that it is drinkable. This was exemplified by some young girls who said that in their community, in an attempt to ensure that the water was clean and to improve the quality, many put more ‘Certeza’ into the water than prescribed, leading to an intensification of the smell and causing vomiting of both children and adults and the abandonment of the product. Related to the use of ‘Certeza’, the same young adults stated that they and their parents were at first
insecure about the effects when hearing about this product at the hospital, considering the negative impacts this product could have on their body and health.

**Water Usages for Hygiene Purposes**

In addition, a household is also using this resource for hygiene purposes, for example the practice of washing clothes. Laundry, according to interviewees on the household level, is usually done at the river as it needs a great amount of water. The river is also used for personal hygiene. Women explained that they often take their bath directly at the river, together with their children, while fetching water and washing clothes. This is in order to save time and reduce the amount of water they need to carry home.

Furthermore, the water collected from the river, mainly through opened wells, is also used, for example to cook, to clean the house, wash the dishes, vegetables or hands. Related to this, some interviewees within the community and working with it argued that not all households are following such water-related hygiene practices, which can provoke diseases among the family members.

Water, for these purposes, based on the explanations of the interviewees within the community, is generally not transported, stored, or treated in a special way. When having close access to a borehole, this water is also used for the kitchen rather than water from the river, as explained by the interviewees at the household level. However, rules around the usages of boreholes usually exist. Washing yourself at the borehole, as well as using the water for laundry is forbidden, the former for hygiene reasons and the latter due to the volume of water needed.

**Labour Division of Tasks**

Within the different usages of water, several responsibilities within a household exist, often divided between the genders.

In general, as explained by the great majority of the interviewees, women work in the fields and are also responsible for taking care of the children, for cooking, and for implementing hygiene practices within the household. Men, apart from working in the fields, have to fulfil specific tasks within both agriculture and the household, such as opening new fields or repairing the roof. Furthermore, it is also the task of the man within the household to
be the decision-maker over, for example, the usage of income or the sale of produce. Other tasks are done together such as fetching firewood.

However, several people within the community, as well as individuals working with it, also mentioned that there are, nowadays, changes within these divisions of tasks. For example, men can also carry babies or help to cook and women are now able to purchase their own capulanas and have more responsibilities in community groups and committees.

Following the argumentation of the majority of the interviewees reflecting on this topic, there is seemingly one task that is still in the hands of the women and no change can be observed: fetching and carrying water. This, being a female task, can only be done by the women or the children, both girls and boys. The latter, however, are only allowed to do this task until they get married. A man, as explained, especially within interviews with families and other community members, is only allowed to fulfil this responsibility if his wife is sick, away, or ‘very tired’ coming from the field.

4.2 Interactions around Water Practices

After having presented several behavioural practices around water usages, this section is introducing interactions around this resource that were mentioned by the interviewees as well as observed. Five different ‘entry points’ of interaction were identified by the researchers, always focusing on the household within these relations; starting within the household itself, followed by the community, the public sector, the civil society, and the private sector.

Interactions within the Household

Within a household, looking at water practices, the most common interaction that is taking place seems to be between parents and children, occurring in a reciprocal relation.

Taking a deeper look at the parents-children relationship, it was generally understood, not only by families but also by actors working with the households, that a lot of knowledge about the usages and, furthermore, the practices around water, are taught to children by their parents. For example, how to open a well or how to purify water. Often it was also explained by the families as well as other interviewees that most tasks around the usage of water within the household are taught by the mother as she is responsible for the children. This is mostly done by, following explanations by some mothers, allowing children to see what they are doing in practice.
Besides this way of providing information, it was highlighted by actors, such as children, parents, or community workers, that children or youth also give information to their parents, for example when learning something new in school. Although some children stated that older people are not listening to them, throughout the interviews with the aforementioned interviewees, several examples of cases where parents took the recommendations into account and implemented them, after the child explained and showed the practice, were pointed out. One example was that parents started using a drying rack in the sun rather than putting the dishes in a damp place on the floor.

Another source of information exchange, raised by some women and people working with families, is having discussions between wife and husband. However, looking only at parent-child or vice-versa relationships, as well as between parents, as explained by some interviewees within the education sector, would not represent the family or household structure of Mozambique adequately. When having several children, explained by the interviewees outside the family, the oldest (daughter) is often taking care of the younger siblings; taking over, to a certain degree, the tasks of the mother. Therefore, interaction is also taking place between children themselves. Furthermore, interviewees from the education sector argued that it is also common to be part of an extended family.

In addition, family members, not only obtain information from within the household, but also receive such from institutions, like the school, the hospital, or from the community, as will be elaborated on in the following sections.

**Interaction between the Household and the Community**

Besides the household structure itself, there is also a great amount of interaction within the community,\(^4\) which has been raised by several interviewees at all levels of society as well as has been observed, and this can be divided into several components.

On the one hand, there is an immediate, unorganised interaction between households and the neighbourhood. Being responsible for fetching water, women described that they are going with their female friends, if possible, to get water at the river, using the time to talk and

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\(^4\) Although generally categorised as the civil society, volunteers from the community and traditional leaders, among others, are perceived as part of the community in this study, following the explanations of the community members. Consequently, the point regarding the civil society, later introduced, includes actors like non-governmental organisations, although some of these categories overlap.
to feel more secure in case one gets sick or hurt. Many people within the community explained that opening a well at the river is often done together as well. Furthermore, some interviewees in the families gave examples of sharing knowledge with each other if they got new information how to, for example, treat water.

Moreover, some interviewees working with the community, but also being part of it, argued that interacting within and learning from one’s immediate environment is common as life is ‘open’ in rural areas of the country. This allows individuals to reflect on their neighbour’s behaviour and practices. For example, individuals or households might try out some new practices if their neighbours seem healthier, such as cleaning the house and drinking treated water, in order to see if this could also result in their household members being less sick.

On the other hand, there are also several more organised structures of interaction within the community, such as meetings, which were named by many of the interviewees organising or being part of them. These are held regularly with the majority of the members of the community and normally cover various topics, including water, sanitation, and health, or provide information about opening a borehole and its maintenance.

Furthermore, several individuals or groups working with the community, but also being part of it, were mentioned throughout the interviews as being providers of information about, for example, agriculture, water, and health issues to the community. Some examples are the ‘mother of the village’ or volunteers, which are partially supported by non-governmental organisations yet still living in the community, local church groups, or traditional doctors. Additionally, another group consisting of members from the community, identified by the majority of the interviewees, is the Water Committee. Ideally there should be one for each borehole. These committees have 12 members, preferably six women and six men, divided in three subgroups: i) financial management, mainly collecting a contribution for the usage of the borehole from each household (on average 10-15 Meticais per month); ii) maintenance, often related to finding spare parts in order to repair pumps, something which is perceived as a major problem in the area; and iii) hygiene, which entails informing the population on how to use the borehole as well as how to behave around it.
Interaction between the Household and the Public Sector

Interaction is also occurring between the household and the public sector, surrounding the identified water practices, presented below.

The Health Sector

One structure that a household interacts with, mentioned by the majority of the interviewees within the community and families, is the hospital and smaller health posts closer to the community. As explained by the hospital staff as well as the community, the hospital organises lectures every day in the morning, before consultations, so that all visitors, men and women alike, get information about illnesses and how to avoid them. However, it was raised by the staff that although the lectures are for everyone, it is mainly women who are at the hospital for mother and childcare. In these lectures, taught by a nurse, different kinds of topics are covered like the importance of clean water, diarrhoea, cholera, and malaria. Interviewees on the community level also pointed out that they get explanations at the hospital when they are ill, and, as such, know about preventative measures from previous experiences of being sick.

In addition, health staff also goes out into the community in small brigades or mobile units to explain diseases and how to prevent getting ill.

Extensionists

One further group within the district, which plays an important role in informing about issues and opportunities regarding the wide variety of water usages, are extensionists. They presented that their work is within agricultural services and to introduce new techniques and tools to individuals and farmers associations. Within agriculture they, for instance, work with animal husbandry and irrigation practices. In addition, they also have basic knowledge about issues related to water and health.

The School

Another important structure in the public sector is the education authorities, mentioned by interviewees of all ages within the community. Two interviewees within the education sector raised that the initial knowledge varies a lot among the students just starting school. Therefore, the school tries not only to present new information, but also to complement the basic knowledge that children already have about water practices, like drinking clean water. Besides highlighting the importance of child education, it was further stated by some
interviewees within the public sector and civil society that adult education is essential and needed within the country, which is increasingly promoted by the public sector.

**The Community Radio**

Another source of information within the community, often mentioned by the interviewees at all levels of society, is the community radio. It sends its programmes at different hours and uses Macua and Portuguese, oriented at the respective target groups. The radio airs programmes on a variety of topics including, for example, agriculture, water, and nutrition. These broad topics have many sub-categories that are discussed, for example within agriculture, where fish breeding or new agricultural techniques are explained.

**Interaction between the Household and the Civil Society**

There are also non-governmental organisations that carry out work in the district of Ribáuè, which were mentioned by the community but were also interviewed throughout the field work. Some of these organisations focus on the agricultural sector, others on water and health, and a few look into both fields, separately or combined. Besides looking into different topics, these non-governmental organisations also utilise different approaches, focusing on teaching the community or seeking to include it as much as possible, for example training volunteers or setting up youth clubs.

Before entering the last section, the private sector, one further point should be raised in this context that was emphasised on different levels of society; the situation concerning the promotion of chlorine as a method for treating water. This is relevant not only for the interactions between the household and the civil society, but also for the aforementioned ‘entry points’ of the community and the public sector.

**The Problematic ‘Chlorine and Cholera’**

Throughout the years, as presented by interviewees within the community as well as working with it, many rumours around chlorine arose, implying that it is killing people. It was explained that some people believe that cholera, instead of chlorine, is used to ‘treat the water’ and, therefore, provoking rather than combating the disease. It was further emphasised that several persons, being part of the public sector or the civil society within Nampula or the district of Ribáuè, giving out or promoting chlorine, were beaten or even killed by community
members. Although such incidences are seemingly decreasing as of late, it has also been stated that there are still some occurrences reported within the country.

Some explanations were given throughout the interviews on all societal levels as to why this problematic exists. On the one hand, interviewees within and outside the community said that they believe that the words cholera and chlorine (in Portuguese: Cloro and Cólera) are too similar, which makes the distinction more difficult. On the other hand, it has also been presented that it is not (only) because of the resemblance of the words, but rather being political interference as it was mentioned, by these interviewees, that this belief of ‘chlorine contamination’ is more common during election time.

Interaction between the Household and the Private Sector

The last ‘entry point’ of interaction is the private sector, which currently does not seem to have a major role in the field of water in Ribáuè as it is, as explained by interviewees at the provincial level, mainly contracted by the public sector in order to execute implementations, for example drilling boreholes.

As mentioned earlier, purchasing spare parts for the boreholes is difficult, explained to be due to the few merchants selling such items in Ribáuè. This was perceived as problematic by many water committees as well the staff working closely with the community. There are also some smaller private actors, such as local traders selling purification products like ‘Certeza’, as explained by one of them.

4.3 Behavioural Change around Water Practices

This section looks into behavioural change around water practices and their potential development on a household level and how, in the view of the families and other society actors, this might happen or has occurred. These statements are perceived as significant in order to gain a more holistic and accurate picture of such processes of behavioural change and of the environment in which they take place, in order to foster the understanding. The descriptions regarding these processes and their environment, as well as the abovementioned points about behaviour and interaction, are analysed, using the seven concepts of Symbolic Interactionism, in the following chapter.

The main patterns of behavioural change, mentioned by these interviewees, were habits and customs, the mentality of household members, the suitability of the teacher, communication methods, and the conditions of the household.
Habits and Customs

The first pattern, emphasised by many interviewees on the household level, was that if they have always been following a practice, or if the practice has not been perceived as having negative impacts on the livelihood, they do not see a reason why they should change their behaviour, especially if they have been implementing it their whole life.

In addition, many of the interviewees, both families and individuals working closely with them, raised that a number of practices are part of the customs that are taught from one generation to the next or are seen as something inherited from the ancestors, such as opening a well. These are educated at a young age and through traditional education and advices, as one person working with such teaching explained. One example is the responsibility of fetching water for a household, which is a traditional female task. It was pointed out by households, community members, and people working with the community, that if a man, nonetheless, carried out this chore, people would see him as a woman or as disrespecting his wife by doing her tasks. This might lead to the loss of respect for the man in the community. The wife, in addition, may get offended, feel embarrassed, or question if she is doing anything wrong.

However, it was raised by many working closely with the communities as well as the families that practices and traditions are slowly changing. Yet, many working with these things also emphasised that it is important to understand that not all traditions are bad and some should rather be encouraged than left behind.

Mentality of Household Members

Some families, as well as people working with the community, pointed out that, although hearing and understanding the information, there are individuals who will simply not change because they can only see one way or are ‘narrow-minded’. One example raised is that men are not necessarily against messages presented to them about water related to health, but rather that they do not perceive themselves as responsible for these tasks and, therefore, may not be receptive or present at meetings.

Another point that was raised by some young interviewees, as well as people working closely with the community, was that many people draw conclusions based on old habits and argue, for example, that they have used the river or well water for a long time and never got diarrhoea, so ‘why should they change now’. It was also stated by interviewees at different
societal levels, that some people make no distinction between different sources, believing that the water is of the same quality as it always has been. One student explained that this is not the case because of the increased use of fertilisers on the fields, contaminating the water.

**Suitability of the Teacher**

Many interviewees working with the communities, but also some traditional leaders, emphasised the importance of who is addressing the household with new information and recommendations. It was raised that, unless this is considered, little behavioural change will occur. It was highlighted by persons working in the field, but also the community, that the most influential people within the structure, whether the person is a religious or a traditional leader or another individual, generally has a greater ability, than someone external, to ‘influence’ the population in their area.

One person, who was perceived as an important teacher in a household, stated by the community, is the mother. Some young girls raised that they learned several tasks from their mothers, for example, how to treat the water, but they also went to school where they were taught about microbes in the water. While discussing this issue, they said that the water is not necessarily clean when there are no particles in it because microbes are not visible to the eye, only with a microscope. However, the water filtered by their mother was still recognised as drinkable and ‘clean’, and they cited that the microbes, although not visible, ‘probably’ get captured by the cloth; especially if it is a tightly woven capulana.

**Communication Methods**

Another pattern that was raised to be important for people to change their behaviour is using certain communication methods and tools to convey the message or information.

One such method mentioned is ‘learning by doing’. Interviewees, youth and adults, highlighted that by carrying out or ‘experimenting’ with what they have been taught is important in order to understand and learn the new practice. An example underlying this argument, stated by an interviewee from the education sector, was that girls have more opportunities to understand what the school is trying to teach about water because they are the ones who are more likely to implement it in practice. Furthermore, when asking children how they present new knowledge to their parents, the common answer was that they do not only
explain but show it. Some women within the community mentioned that they would try a practice and continue only if it works or results have been seen.

Interviewees who are teaching communities raised that most individuals know about various effects of their practices and can provide the answers themselves because they have observed or experienced them. For example, within drinking water, there is a conception, raised by both households and those working in the sector, where many understand that they have to purify or treat their water if they see that it is dirty with leaves, sand, or soil. However, few recognised that the water can still be dirty or contaminated with microorganisms despite that it ‘looks clean’, which then has to be addressed by people teaching or giving out information. Considering the argument of observing and experiencing certain effects, some interviewees working with the community argued that telling stories about real life situations, like women going to the river to fetch water, or showing images picturing the every-day life of a common household in Mozambique and its good and bad practices, is supporting the understanding and internalisation of the information.

Yet, another factor, as described by some interviewees working within the community, but also observed during the interviews, is to be sensible with the language used. It was explained that Macua should always be utilised if needed instead of Portuguese, as a great amount of people in Ribáuè do not understand, or only partially comprehend, the latter. Furthermore, some persons highlighted that using simple language, rather than including many technicalities, is essential.

Taking the local circumstances into account, for example certain traditions or beliefs, is generally understood as necessary by all of the interviewees working with the communities. Ignoring these could potentially lead to negative outcomes, as exemplified by one interviewee working with nutrition to have occurred with the attempt to use ‘model families’ in order to introduce knowledge. This is problematic as there is a strong culture of avoiding to draw attention to oneself, not to rise above the others, which is important when, as described before, a family is dependent and interlinked with its neighbourhood.
Conditions of a Household

Within this pattern of changing behavioural practices, the points described by the interviewees are categorised in four sub-categories: socio-economic conditions, education, dispersed population, and time.

One argument, raised by several interviewees working with families, as to why people might not change their practices is the socio-economic conditions that a household is situated in. Many people working within the community perceive this as an obstacle that influences one’s capacity to process and, furthermore, implement certain information. This is often mentioned by community members and people teaching, to be related to the resources a household has available, such as access to money, which influences a household’s possibility to, for example, buy ‘Certeza’ or to potentially contribute to a borehole.

Having access to education was also mentioned as one condition of a household influencing behavioural change as it enables a family member to, not only appreciate the value of the information or to access it from other sources, due to the ability to read and write, but also to be able to process it. Some working in the sector of education said that it also helps an individual to understand the relation between cause and effect or other linkages. Some young girls, however, highlighted that understanding certain linkages or explanations are easier when the experience is closer or more immediate, as for example, being at the hospital with diarrhoea and having the health staff explaining why they got sick.

When talking about factors influencing change, it was often stated by interviewees from different levels working with the community, that one obstacle is that people in Ribáuè live quite dispersed and there are far distances between the communities in the district. This often leads to the challenge of reaching the population with information.

Moreover, as mentioned by several interviewees throughout the society, learning from one’s immediate surroundings may be hindered when living far away, because even if one household changes its behaviour it might not influence other households as they are not nearby. As some younger interviewees explained, besides going to school, reflecting on the

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5 Within this context, some interviewees, especially being in close contact or being part of a community, offered a personal definition as well as some indicators that, in their opinion, were helpful to understand a household’s situation. Accordingly, a household with better conditions generally has a production surplus to sell, at least one chicken, a bicycle, a mosquito net, a chair, often a paid job, or a better constructed house closer to the community or roads; the latter implying better and easier access to sell one’s produce.
‘society’ and making one’s own analysis also promotes gaining new knowledge and to implement new things; in this case, for example, to find out more about irrigation systems. When being more dispersed, one communication dissemination that was perceived as useful was to listen to the radio as some interviewees, within the community, stated to have gained new knowledge from this source about nutrition or how to purify water to avoid diarrhoea.

However, some people within the community also mentioned that there are positive changes within the community as the old structure of having someone responsible for every ten households is increasingly utilised, which improves the dissemination of information as well as a household’s benefit from being connected to the rest of the community.

*Time* is considered an important factor for a household, and it is explained by families that many choose, for example, a closer water source even when a ‘safer’ one is available if it is too far away to walk and carry the water back home. As stated by these interviewees, having a borehole nearby means that time can be saved and used on several other tasks or chores as one does not have to walk far to get water nor spend time purifying it, in order to make it drinkable. In addition, having a borehole close by makes it easier for households to plan as many individuals, getting water from a river, raised that boiling water is easy in theory, but to implement it in practice requires time.

In general, interviewees working with the community pointed out that changing people’s behaviour takes time, and can often only be done ‘little by little’.

Within this chapter, described and observed behaviour and interaction within and around households in Ribáuè have been presented, as well as how changes around water practices are perceived by the population and individuals working with the communities. These findings are analysed in the following chapter, using the seven concepts of the analytical framework of Symbolic Interactionism.
5. **ANALYSIS**

This chapter, providing an analysis of the findings, is structured in three sections. The first is addressing the question whether or not there is a recognised need within the findings to develop the water practices of households in Ribáuè, answering the second research question. The second part applies the seven concepts of the analytical framework in order to analyse the information provided by the interviewees as well as the observations. This is carried out in order to understand the environment in which households’ water practices are embedded and how the development of such practices can be encouraged, with the aim to answer research questions three and four. Subsequently, the last section gives a short evaluation of the utility of SI as the analytical framework.

5.1 **THE NEED FOR DEVELOPING WATER PRACTICES**

Introducing the first section of the analysis, one of the questions raised by this study is to understand how the interviewees look upon the necessity to improve, and thereby develop, water practices. Change, as explained within the introductory chapter, is essential to development and, exploring these perceptions, subsequently, can contribute to an understanding of why such practices may or may not need to be improved. Furthermore, this might provide an insight in how the development of water practices could be encouraged, which is further analysed, using the analytical framework, in the following section of this chapter.

Within the water usages for the field, several interviewees raised that it is nowadays no longer possible to follow the rain calendar as before; complicating the cultivation of crops and thereby endangering the food security of households. Therefore, people need to start to plan their agricultural activities in time to make use of the first rainfall. Furthermore, many interviewees within the public sector as well as the civil society expressed their vision of having more irrigation methods introduced in Ribáuè. Due to the irregularities of the rain, irrigation was often mentioned to make it possible to produce all year and grow more crops like vegetables. However, there is limited knowledge on how to improve these methods in a more efficient or sustainable way and it was also argued that too much water could damage or destroy this type of crop, leading to the impression that this practice has the potential to be developed. This would, as explained before, result in greater food security, a better diet, or a better income for the household given the market demand for vegetables.
When discussing animal husbandry, the second water usage in this study, it was stated by some interviewees from the public sector, that there is seemingly a need to change the existent practices. Following these statements, it appears that some people give their animals dirty water, which can lead to sickness or even death of the animals. This can have great consequences for the family as animals are, as mentioned before, a family’s ‘living bank’ (account) and, in certain cases, a source of nutrition.

Within the third usage, water for consumption, as recognised in the findings, the majority of the interviewees stated that there are still poor water practices in place regarding the collection, transport, storage, and treatment of water. As explained by the interviewees of all levels of society, not improving such practices has severe consequences for the health of a household and these were also recognised to be applicable to the usage of water for hygiene purposes, like washing oneself, vegetables, or keeping the house clean. Not performing improved practices within these two water usages have been described by the interviewees to have a great negative impact on a household as people may get sick. This often means that members are not able to work on the fields, either because they are ill themselves or because they have to be at home and take care of the sick children, who, consequently, are unable to go to school. Therefore, developing water practices perceived to be poor, within the area of water consumption and hygiene purposes, seems to be crucial for improving a households’ livelihood.

Following the interviewees, it seems that developing the water practices within the four water usages is perceived as necessary and vital as it, for instance, can result in more income, less cases of sick family members, a more stable production, and, hence, less food insecurity within households.

However, it should also be stated, following some of the arguments of the interviewees, that not necessarily all habits and practices have to be developed, but only those seemingly having a negative impact on the household. Moreover, developing practices is also, to a certain degree, connected to the conditions around the household as it, for example, could be difficult to access information about new water practices.

Having recognised the need to improve certain practices and by looking at such features, the following section further explores the environment that a household is embedded in.
5.2 Environment and Encouragement of the Development of Water Practices

The second section of the analysis applies the seven concepts of Symbolic Interactionism (SI) on the findings in order to explore how the environment of the water practices in Ribáuè is shaped and to add to the understanding of how the development of such can be encouraged.

Capacity for Thought

Applying the first concept of the analytical framework, the capacity for thought, many findings indicate that people generally have a logical line of thought, a rational reasoning process, and a reflective behaviour. One example is the statement by many of the interviewees in the community that they only continue certain practices if they can see that it works, if they can see results. However, there is, as people explained and which could be understood within the answers of some interviewees, a common misconception that water is ‘clean’ when it has no observable particles. Consequently, filtering or purifying the water from (only) visible particles, like soil, was perceived as enough by some. In addition, young girls explained that community members put more ‘Certeza’ than prescribed in their water in order to improve and ensure the quality, pointing to a very reasonable course of action, despite the poor health consequences.

These examples indicate that there are cognitive processes which do not necessarily result in positive, but potentially also negative, implications within the described water practices. Some individuals do not start to treat their drinking water, because the water is seemingly ‘clean’, and others stopped treating this resource as the use of the purification product had direct health consequences, as they used more than prescribed.

However, this seemingly rational aspect of human action could also explain why some people would not see the necessity of changing their behaviour as their habitual practices, in their opinion, have not had any negative impacts so far. Furthermore, this seems to imply that individuals can make their own decisions based on information they receive, reflect upon it, and choose to either accept and follow or discard it.

This indicates that the concept of rationality is central to behaviour, interaction, and how people reflect on and interpret their environment; individuals behave and interact for a reason, based on a logical process, which appears important to consider when seeking to encourage
the development of water practices. However, as touched upon in the findings, it seems that all individuals are further influenced by interaction, using the capacity for thought for creating and guiding such processes.

**Interaction**

By looking at *interaction*, the second concept, this seems to be central to water practices, following the interactions identified and exemplified in the findings. This concept is not only important in order to gain a deeper understanding of behaviour, but furthermore to explore the different ongoing processes surrounding interaction, such as socialisation.

**Socialisation**

Following the findings, it can be recognised that water practices in Ribáuè seem to be learned and transmitted through socialisation processes. Numerous of such could be identified, yet the most commonly raised was that children learn from their parents. In addition, being part of the society, interacting with the neighbourhood, going to school, or being educated ‘traditionally’, are other identifiable socialisation processes.

Information within socialisation processes can go two ways: individuals obtain but also shape the information to their needs. Many interviewees stated that they compare new information given to them with what they already know. This indicates that individuals either adopt or do not adopt the new information based on the knowledge they have accumulated through various interaction processes, as well as being reflective, having the capacity for thought. For example, farmers when explaining that they were (actively) given information about introducing fish breeding saw this as a possibility to increase the household income. They seemingly considered their options and the information in relation to their perceived needs and other socialisation processes, like being a farmer, member of an association or a household. This example indicates that these farmers did not necessarily look for the information, but compared it to their needs when they received it.

Another example is a mother, socialised to be responsible to take care of the children, who in this regard, when the children were sick with diarrhoea, also searched for, or was more

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6 Due to this two way process of socialisation within the Symbolic Interactionism definition, it may be difficult to distinguish between sources of information as they are highly connected. One example is school, where information is actively provided (in the manner of teaching to the pupils), but additional information is also obtained through the socialisation process of going to school (for example being a student in a larger group). Both are actively shaped by the individual to suit her or his needs. Using this example, it shows how the two aspects, the ‘flow of information’ and socialisation, are highly correlated, yet independent, which may at times obscure the fine line between them.
receptive to, specific information. As she knew the linkage between diarrhoea and clean water, she was consequently more open, and implemented information about purification options, when hearing about it in the radio.

In relation to this, every individual is influenced by a unique mix of socialisation processes and interactions (also among members of the household), which allow for an individual to reflect differently on events. Taking a look at a household and its members, being taught at a community meeting about certain water practices, for instance, it might occur that the youth interpret information differently because they may have the socialisation process of being in school, which few in the older generation have had. Developing this example further, this also indicates that (different) socialisation processes may also have an impact on the decision-making of an individual. Consequently, this may influence people differently, besides appearing to be in the same context, as the choices are made by an individual not only in relation to one ‘socialised structure’.

One further example is that some young girls learned to filter the water from their mothers, but they also got educated parallelly about microbes in the water in school. When reflecting upon the importance of clean drinking water and the different methods of purifying it, they stated that one should not assume that water is clean when there is nothing visible and were describing the situation in detail of having microbes in the water and its consequences. Although having learned about microbes, as their mother told them the water is clean when using a cloth to filter the water, it appeared to the researchers that the girls thought that the microbes were captured by the cloth. Hence, the girls seemingly did not question what their mothers taught them, despite having the knowledge at hand. As such, it looks as if some socialisation processes have a greater influence on an individual’s capacity for thought and, consequently, for example, on decision-making. This appears to shed light on an aspect that, if recognised, could have an impact on how information should be passed on and the methods used in this process. As some socialisation processes seem to be more influential or carry more weight, not taking them into account may lead to obsolete attempts of spreading information because it does not get acknowledged or picked up by the target group or individual. Yet, this also indicates that sending the same message through multiple sources of information or considering, as stated above, that an individual is embedded in different socialisation processes, may enhance the chances of an individual to value the information and apply it in practice.

These examples also illustrate an interesting insight in the result of multiple socialisation processes that might shape one individual. On the one hand, the multitude of sources of
socialisation might influence the reception of and reflection on a message, particularly if the same message is provided. On the other hand, especially presented in the latter example, it also indicates that being exposed to several socialisation processes can result in, for example, confusion or misconceptions. Reflecting and learning by socialisation is not only executed in relation to the capacity for thought, but furthermore also surrounding objects.

**Objects**

Another result of multiple socialisation processes is that many understandings for one object can be held by an individual, but it can also be perceived completely different by another person. Water, for instance, can be seen as a physical object but can also be understood as an abstract object. Individuals might describe water within the same category, yet the meanings held might differ. One example is that water, on the one hand, is perceived by people in Ribáuë as essential for life, whereas on the other hand, it is also recognised as a force of destruction. The latter case describing a situation in which water is destroying roads and bridges, leading to loss of access to infrastructures, like the market, the hospital, or the school. Perceiving objects in several ways is not necessarily a problem, yet having different meanings might give rise to, for instance, miscommunication. For example, a few stated that the water was clean after being filtered and others said it was not, which can also be a result of various socialisation processes surrounding the object ‘water’.

Interaction as a whole, thus, seems to be an important feature focusing on the water practices within and around households. As exemplified, various socialisation processes concerning one object can lead to negative impacts, such as confusion, but can also be advantageous because it may encourage the internalisation of new information. By taking these interactions into account, utilising multiple socialisation processes providing the (same) information may support the development of water practices.

**Meanings and Symbols**

Following the third concept, *meanings and symbols*, some meanings were recognised within the findings that are held by individuals whereas a few are also shared among groups. One example is the meanings held regarding the water practices in irrigation. Whereas some perceived this only as a method to grow vegetables, others looked upon it as a possibility to develop one’s economic activities and the few, having certain irrigation tools as a dam or tank, appreciated this technique as ‘indispensible’.
Another important water practice, that besides its meaning could also be argued to be a symbol, was the task of fetching and carrying water, which was emphasised to be something a woman does because it is her role within the household and out of respect for her husband. The meaning of this task (‘respect’ and ‘womanhood’) was mentioned by all of the interviewees, elaborating on this matter, to be shared by the larger community and, hence, seems to be symbolic. Consequently, a man shows respect to his wife by not doing her chores, but if he would, this could lead to a loss of respect for him within the community, or he might potentially even become feminised, which may hold negative connotations. According to SI, symbols can be purposely used to communicate something, and a man, following this argument, fulfilling this task could potentially do it to demonstrate marriage problems or that he has no respect for his wife.

This example is interesting to develop further, as it might give an insight to the consequences of not having the same attributed meaning to such a symbol. This could potentially lead to conflict or miscommunication, for example, if another individual would enter the context, not having had the same socialisation, and therefore not be aware of such understandings.

Trying to encourage the development of water practices, utilising stories of real-life situations in the community or providing images, may be necessary or helpful to communicate certain meanings or symbols in order to pass on the information successfully. Hence, having aligned understandings seems to be important as well as to consider the symbols or words being used, which appears to be vital in order to transmit the intended message, indicating the significance of language.

**Language**

Words represent various meanings and using different languages, the true intention may not be captured, especially if words are poorly understood, which could have negative consequences.

As outlined above, symbols exist only because they can be described by words, and, thereby, not having the same language or the same level can cause problems in understanding symbols and meanings that are being communicated. In Ribáuè, two main languages are spoken, Macua and Portuguese, but not all people speak both.

One further example that was often raised by people within the community is the ‘cholera and chlorine’ problematic. Some mentioned that the language was a barrier, because the two words are very close together (Cloro and Cólera) and said to not be clearly distinguished.
when spoken about. This could potentially lead to miscommunication or conflictual interaction as the meaning held of the two words differs significantly.

As a result, it appears to be important to recognise the linkages between meanings and symbols, including language, as well as interaction. These, and the messages communicated through them, should be alike and held by all parties, especially when aiming to encourage development of a household’s water practices, in order to foster veritable communication.

**Covert and Overt Behaviour**

Taking a deeper look at the fourth concept of SI, *covert*, as well as *overt, behaviour* was recognised in the interviews and observed by the researchers within the situation in Ribáuè. One example of (only) ‘overt behaviour’ is the argument that ‘they do as they have always done’, where it could be understood as if no thinking process, as such, is part of the behaviour but it is rather a habitual practice. In addition, as touched upon in the first concept, that people are reflecting upon these practices should also be considered, as individuals may have certain reasons for doing what they do. Therefore, covert behaviour is often part of these processes.

One illustration of such is that individuals state that they compare new information with what they already know, seemingly including a reflection process. Sometimes, this results in no visible human action (inaction), but more often overt behaviour ensues. Some interviewees in the community mentioned that when they received information about ‘Certeza’ at the hospital, they asked themselves what negative impact this product could have for their body. As such, covert behaviour, unless addressed, could potentially hinder implementing new information, pointing to that this relation between covert and overt is essential to be recognised and understood.

Therefore, it is central to take both, covert and overt behaviour, into account, as they, following the argument of SI, are equally used; together and separately. For example, individuals also raised that they wish to see results and experience that a practice works before they engage in it, implying that explaining a practice in theory is not necessarily enough, underlining the concept of including both, the overt and the covert behaviour, when transmitting new water practices.

**Definition of the Situation**

Applying the fifth concept of SI and trying to understand how people *define their own situation*, some examples of such can be recognised within the findings. One is that people
state that why they do not treat their water is because they, taking it from the river, have never before gotten sick from drinking it. As they define their own reality as such, they do not see the need to treat their water.

In addition, throughout the interviews, a pattern of viewpoints emerged where many working in the field of water raised issues of education and socio-economic conditions as reasons for individuals’ struggles, or lack thereof, to implement water practices. However, only a few from the community raised this point by themselves. Taking the idea of a self-fulfilling prophecy into account, this statement could, nevertheless, be analysed from two different views. On the one hand, it could be the case that an individual perceives (or accepts) the situation as such and therefore might act accordingly, yet, on the other hand, an individual being confronted by arguments, such as poor socio-economic conditions being the reason for their situation, may, although not initially considering this to be her or his own situation, start to act within it and increasingly define it as its own reality.

As individuals have the capacity for thought and also partly adapt information obtained through various socialisation processes to their needs, as mentioned above, consequently, they can make choices, which could change the definition of the situation. Bearing this in mind, however, it might be difficult to influence an individual’s definition of reality on its own, as there might be many elements that may influence such a process, for example, the shared definition of a situation.

One consequence of this could be that the community reinforces and creates these shared definitions by interacting with a household continuously, which could hinder or encourage development of practices through the ingrained meanings or change of the socialisation process on the community level. Again, taking up the division of tasks, it seems that even if a household decides on its own to change certain practices, for example, to allow the man to fetch and carry water, the community, being part of creating this reality and acting upon it, may stigmatisate the household. An apprehension that could also hinder an individual from carrying out such a change of practice in the first place. Taking this argument further, it seems easier for a family to change practices within the household as it ‘only’ acts upon the created and defined reality within this environment.

Therefore, the definition of the situation appears to be central to the encouragement of, and obstacles to, development of water practices for individuals, households, and communities alike. Besides acting upon its own defined situation, an individual, being part of the society, is also seemingly exposed to connotations due to the reality created by the community. In
relation to this, as stated by Symbolic Interactionism, when interacting, individuals consider
the actions of others and reflect on how to act in relation to them. This, and the impact this has
or does not have on an individual’s decision-making, is elaborated on in the subsequent
section: the self.

The Self

The previous example, a man fulfilling the task of fetching water, could also be examined
with the sixth concept, the self. Applying this could reveal possible tensions between what a
person would like to do (the “I”) and what a person should do (the “me”); the latter based on
how the individual wants the community to see her or him. This tension may be a major
obstacle when making choices.

In addition, the concept of the ‘model family’ could be another example of such processes.
Although a family or an individual might be ‘better off’ or implementing and following a
different practice, it may be decided not to put it on display, as individuals reflect on how they
think others might react. Based on this imagined reaction through capacity for thought, an
individual or household may choose its action in accordance to such an image. Consequently,
one acts on what it thinks will reap the response closest to the one it wishes for or leading to
the least negative connotations.

Hence, reflecting on one’s own action, and how this could be perceived by others, is
seemingly a factor that influences the alteration of water practices. Moreover, being a member
of a community might have further implications on a household’s development due to, for
example, certain expectations or traditional customs. An individual, comparing itself to others
and the community, may be initiated to follow if the community changes, but it can also feel
hindered to do so, individually, if the community does not and rather stays with the existing
behaviour. This highlights the need to take a deeper look into teaching groups or communities
about water practices, rather than on an individual basis, especially in the case of having the
focus on the household, being seemingly the immediate link between the individuals and the
community.

Society

Taking a look at the seventh and last concept, society, it was also often raised within the
interviews that the geographical distance can be an obstacle to, for example, receive new
information about water practices. Symbolic Interactionism argues that the geography,
although it can be an issue, does not have to be one per se as communication is possible despite being dispersed, like people within Ribáuè coming to community meetings. As such, interaction occurs but it is seemingly lessened when large distances to neighbours or the community are involved. Consequently, it could be stated that communication can survive distances, however not without interaction. Looking at the findings, increased use of the community structure in disseminating information, such as the person responsible for every ten households, seems to facilitate interaction. Hence, the distances between people appear to be an important condition to consider, although not an insurmountable obstacle, in order to encourage interaction and potentially influence the development of water practices.

One other impression gained throughout the interviews was that the more a family is involved and interacting with the community, the better informed, for example about water practices, and integrated it was within the societal structure, like being an association or committee member.

In order to support the development of water practices, these factors should be taken into account, yet it should be highlighted that the potential obstacles raised are seemingly possible to overcome.

In summary, this section has shed light on the setting in which individuals and households act and interact around water practices and answered the related research question. Consequently, how the development of such practices may then be encouraged has been elaborated on, addressing the corresponding research question.

5.3 APPLYABILITY OF THE ANALYTICAL FRAMEWORK.

The last section of this chapter provides a short evaluation of the utility of this analytical framework for such a research, having the aim to understand water practices and the environment in which households appear to be embedded.

Besides applying Symbolic Interactionism as the analytical framework in order to understand the reality of households, it was further possible to recognise how highly intertwined the different concepts of SI are. Hence, this study is highlighting the complex reality and the (inter-)linkages that exist within it, yet only being limited to the specific case of Ribáuè and the population living therein.
Moreover, by applying SI throughout the whole research, it was also seen as a useful tool for a reconceptualising study by providing guiding concepts for the data collection, the presentation of the findings, and the analysis, yet not being too rigid in its concepts to limit the interpretative feature of this study.

With the aim to understand and explore households’ water practices in Ribáuè, the analytical framework applied has been perceived as a facilitating tool, shedding light on issues and elements, in relation to the crucial resource in focus, which could otherwise have been missed.
6. CONCLUSION

This final chapter summarises the results of this study. First, the behaviours and interactions as well as the need to develop water practices are presented. Following this, the environment in which water practices seem to be embedded is outlined; accompanied by a figure giving a picture of this situation. Furthermore, the main points recognised in order to understand how development of water practices within a household could be encouraged are highlighted. The chapter concludes with an assessment of these elements and how this study can contribute to the comprehension of such processes.

Behaviour around Water Practices

In conclusion, looking into the four water usages (for the field, animal husbandry, consumption, and hygiene purposes), it can be recognised that there are some varying behavioural practices carried out within households in Ribáuè.

Within the first usage, most farmers, being in need for water for their fields, depend on rain-fed agriculture, but among those, only a few have irrigation tools for vegetable crops. Utilising such a method is done by using a watering can or gravitation with furrows, which, in some cases, is complemented by locally constructed dams or pumps.

Having animals, chicken being the most common, the majority of farmers provide the animals with clean water, whereas a few give them water of poor quality.

Using water for consumption, a number of people treat their water, which they collect mainly from the river, to avoid contamination either by boiling, filtering, or using ‘Certeza’, whereas others do not treat their water at all. Some get their water from a borehole, which is stated to not require any treatment.

Within the usage for hygiene purposes, many wash their clothes and take their bath in the river to avoid carrying larger quantities of water back home, and others also use river water to, for example, wash vegetables and clean the house.

Interaction around Water Practices

Exploring the interaction of a household in Ribáuè in regards to the water practices, five different ‘entry points’, including a variety of actors are recognised.

The first level is within the household, through child-to-child, child-to-parent, parent-to-child, parent-to-parent communication as well as the extended family structure. Furthermore, a household is also involved with the community, including the local structures, community
volunteers, as well as neighbours and friends. Another ‘entry point’ of interaction is the public sector including, for example, the school, hospital, or agricultural extensionists. A household’s contact with the civil society is mainly through interaction with non-governmental organisations. The last interaction identified is the household with the private sector, represented by actors like local traders.

The Necessity to Improve Water Practices

A common understanding among the interviewees of all levels of society is the acknowledgement of the need for developing the water practices within Ribáuè. Although not all practices are recognised to be poor, the benefits of improving the majority of them would greatly impact a household’s development and situation, for example, through better health, less food insecurity, and a better household income.

The Environment of a Household’s Water Practices

By taking a deeper look into the environment in which the water practices are arguably taking place within Ribáuè, figure 1 was developed to illustrate the situation, based on the findings and the analysis of this study. Furthermore, this figure, intending to facilitate the understanding of this environment around water practices, depicts the most prominent relations within the analysis. After describing the figure and its components, the understanding gained of the environment is utilised to further conclude on how the development of water practices may be encouraged.

Although not explicitly being part of this figure, the concepts of society and the self are understood to be implicitly included within the other concepts. For instance, the self being an interaction between socialisation processes and the capacity for thought. Moreover, the concept of objects is also embedded as action and interaction occur at all levels around objects; in this case around water.
Exploring figure 1, (a) an individual’s capacity for thought is linked to covert and overt behaviour as a person reflects, often rationally, on its environment, engaging in a type of covert behaviour and often resulting in overt behaviour in terms of action. However, an individual’s previous overt behaviour also influences her or his decision-making through a cognitive process. In addition, the overt and covert behaviour of others are considered by the individual (‘what do others actually think’ or ‘why do some act in a certain way’), which, consequently, are also taken into account for such choices.

(b) In a similar manner, the capacity for thought is linked to, yet influenced by, the socialisation processes that have been, are ongoing, and will be created. Moreover, the capacity for thought is expanded and shaped by the combination of a person’s socialisation processes. These processes may also transform when confronted by the reflections of individuals through their capacity for thought.

(c) The socialisation process also influences the covert and overt behaviour of individuals, as it guides how they actively think and act around an object, but in return the socialisation processes are created, shaped, modified, and terminated following the behaviour of individuals and groups.

(d) All three concepts should be understood as taking place in and being influenced by, in a reciprocal relation, a person’s definition of the situation, being placed in the middle of the figure. Besides that these concepts are also shaped by the definition an individual is already
holding, this definition is also based on the capacity for thought, the behaviour, and the socialisation.

All the interaction (with others and with oneself) that occur between these concepts and this environment (illustrated by the dashed lines in figure 1), seem to be held together and conveyed through meanings, symbols, and language, yet are also modified through reflection and their application.

As a result, this figure highlights elements that shape the environment in which people act and interact around water practices in Ribáuê. Furthermore, it introduces how people may make decisions within this context, influencing the development of water practices.

**Encouraging Development of Water Practices**

These concepts are, consequently, important to consider but are not necessarily enough on their own in order to understand how to encourage development of water practices within households. For instance, socialisation, being part of the concept of interaction, has to be taken into account, but cannot be looked upon separately as it is impacted by the capacity for thought and the behaviour around and in relation to it. Based on the findings and the analysis within the context of Ribáuê, many socialisation processes appear to take place. It seems that some of these socialisation processes may carry more weight, run in parallel, be the same, or even contradict each other, and thus, as observed, it might occur that individuals draw flawed but reasonable conclusions. One example is the young girls learning from their mothers to filter their water, yet knowing about microbes from school.

Moreover, the capacity for thought should be considered as it was a noticeable element in people’s practices and choices. For instance, individuals reviewing a practice and comparing it to previously held knowledge in order to ensure that there is no risk for the health or endanger the cultivation of crops.

Meanings, symbols, and language also need to be kept in mind. Although language is part of symbols, it was found to be central enough, following the findings, to be highlighted on its own. In the case of Ribáuê, the differing definitions of ‘clean water’, the meaning of carrying out one’s tasks, as well as the resemblance yet dissimilarity of Macua and Portuguese, can be understood to be expressed through as well as influencing the interaction.

All of these, the socialisation, capacity for thought, the behaviour, the meanings, symbols and language, occur within the definition of the situation, yet they also influence the defined reality of an individual in return.
To conclude the aforementioned arguments, it appears that the main concept to consider, in order to encourage a household’s development of water practices, is covert and overt behaviour. It seems to be important to identify, highlight, and emphasise this behaviour as it is possible to acknowledge the other concepts as partly included within it, and, yet, this behaviour also reinforces the other concepts, which will be exemplified in the following section.

The Significance of Covert and Overt Behaviour

Hence, based on the analysis, it seems that looking deeper into covert and overt behaviour, both separately and their relation, is crucial. Following SI and the context of Ribâuè, by exploring this behaviour, this study highlights a few points that appear to have potential to complement efforts of supporting a household’s development of water practices, which are summarised below.

One of such points is that individuals are reflective and, therefore, acknowledging this and giving people time and the possibility to reflect on certain information, can seemingly promote the development of water practices. For instance, through discussions as well as encouraging questions, (covert) insecurities and concerns of individuals or groups can be recognised and addressed.

In addition, by exploring the concept and combination of covert and overt processes, this study argues that one should not only explain or teach theoretically, but also demonstrate certain practices and results as well as allow an individual as an (overt) action to implement those. This is a crucial aspect that might support a household to develop water practices.

As it might be difficult to know beforehand how people will reflect, it seems to be vital to consider who will teach and spread the message about new or improved water practices to the household. The closer to the community this person is, the less likely it is that certain (also shared) meanings, symbols, and language may accidentally be conveyed or missed, potentially only being part of covert behaviour. This appears to highlight the remark that it might be interesting to not only look into how development of practices can be encouraged, but furthermore who might be suitable to do this. Questions and concerns held by the individual may then also be better understood and can, additionally, be appropriately addressed. If considered, this may limit potential challenges and obstacles to developing behavioural practices in a household, which also seems to hold potential for further research.
However, as this study has explored the environment and the behaviours and interactions within it, through a more general approach of using SI, it seems advisable to explore, in greater detail, covert and overt behaviour in order to gain a deeper understanding of the importance of this concept within the development of water practices.

Summary

This research has, by exploring some features of the social and cultural dimensions of water, presented findings that offered a deeper understanding of the observed multifaceted resource of water. Without such an outlook, several views could have been missed when conducting this research. For instance, the various definitions of ‘clean water’ held by the inhabitants living and working in Ribáuè. Another example is the argument that, although men might be physically present when being taught about water practices, when it concerns the usages within the household, like hygiene, they might not process the recommendations due to the perception that it is not their responsibility, which might not be visible.

This study, acknowledging the necessity to develop water practices in Ribáuè based on the findings, argues that cognitive and observable behaviour need to be recognised by those attempting to encourage such development within households, in order to understand people’s (in)actions.

It further highlights the importance to look into people’s perceptions of reality and the environment in which they act upon the social world, adding to the research focusing on the economical and technical domains of water. Thus, it also provides additional insights relevant for the academic discourse about contemporary water issues for households within the African context.
7. REFERENCE LIST

Published Sources


Unpublished Sources


**Internet Sources**

APPENDIX 1: INTERVIEW LIST

The location is presented in the following format: the name of the city or locality, posto administrativo, district.

### RIBÁUÈ SEDE, RIBÁUÈ, RIBÁUÈ

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### MUHILIALE C, RIBÁUÈ, RIBÁUÈ

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<td>Elias Moises Chireque</td>
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<td>Dino João Pedro</td>
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<td>Tanya Guitata</td>
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<td>Angelo Ramos</td>
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<td>Vincente Paulo</td>
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<td>Anders Kreitz</td>
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<td>Nina Blidh</td>
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<td>AMODER – The Association for Rural Development in Mozambique</td>
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APPENDIX 2: GLOSSARY

Animal husbandry: Animal husbandry is the agricultural practice of breeding livestock.

Borehole: A borehole, in this study, refers to a drilled hole, ideally down to the ground water, constructed with a hand pump to provide communities with clean water.

Certeza: Certeza is a chemical product used in order to purify water so that it is safe to drink, similar to Javel.

Dry season: In Ribáuè the dry season lasts approximately from May to November. During this period rivers often dry out, which has consequences for the drinking water supply, rain-fed agriculture, as well as irrigation in the area.

Irrigation: Irrigation is the practice of providing water, in addition to rain, to crops such as vegetables. Within this study some examples of irrigation, like using a watering can or furrows in the field, are introduced.

Javel: Javel is a chemical product for purifying water to make it drinkable, similar to Certeza.

Nampula: Nampula is the province in the northern part of Mozambique in which Ribáuè is situated. It is also the name of the capital city in the province.

Purifying water: Purifying or treating water implies to clean and prepare the water coming from distinct sources in order to make it safe to drink. Within this study several purifying methods, like boiling or using a chemical product, are introduced.

Rain-fed agriculture: Within rain-fed agriculture the agricultural practices are relying on rainfall in order to provide water for the crops.

Rainy season: In Ribáuè, the rainy season lasts approximately from December to May.

Ribáuè: Ribáuè is a district in the province of Nampula, located in the northern part of Mozambique. The principal town in the district is Ribáuè.

Treating water: see purifying water.

Key Terms within Symbolic Interactionism

Behaviour: Behaviour or human action is the act an individual carries out on her or his own.

Capacity for thought: The capacity for thought implies that human beings are reflective on their environment and create their ability to think. The mind forms itself through interaction.

Covert and overt: Covert and overt behaviour make a distinction between the covert behaviour, which is a cognitive process, and the overt behaviour, being observable (inter)actions. Both mainly occur together, yet each of them is possible without the other.
**Definition of the situation:** The definition of the situation implies that individuals are acting based on the reality that they create and define as real.

**(Human) action:** see **behaviour**.

**Interaction:** Interaction involves more than one individual and includes a thinking process, related to the **capacity for thought**, around **objects** and other people’s **actions**. One form of interaction is **socialisation**.

**Language:** Language is a sum of **symbols** as the words used within it represent something else. This makes **meanings** possible as they are communicated through the use of words.

**Meanings:** Individuals act upon **objects** and the **meaning** that are given to them through **interaction** as well as the **capacity for thought**.

**Objects:** Objects are categorised as physical, social, and abstract, which arise from **interaction** as well as the **capacity for thought** and include various meanings for different individuals, yet can also be shared among groups.

**Self:** The self describes how an individual sees her- or himself in relation to other individuals and how she or he acts accordingly.

**Socialisation:** Socialisation, one form of **interaction**, is a process that also creates the **capacity for thought**, where information is provided to the individual, yet this information can also be shaped by the individual in regards to its specific needs.

**Society:** The society is created through the **interaction** of individuals, a relation that can be described as interlinked yet independent.

**Symbol:** A symbol is (intentionally) used to represent something else. It stems from **interaction** and its **meaning** is the same for the group of individuals utilising it.

**Symbolic Interactionism:** Symbolic Interactionism (SI) is a perspective developed by Herbert Blumer in 1937. It is focusing on individuals and their **behaviour**, in relation to the **interaction** with oneself and others, within their created reality.