# Co-Producing Drinking Water in Rural Ethiopia: Governmentality in the Name of Community Management

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ABSTRACT: In rural drinking water governance, the reliance on community management has permeated development programmes and water policies for decades. Moving away from a community-centric view, this paper expands the focus to a broader landscape in order to investigate how the state, citizens and other non-state actors co-produce drinking water in the Amhara region of Ethiopia. The study seeks to understand what kinds of power relations are being (re)produced among co-producing actors through the discourse of community management. The conceptualisation of power relations is undertaken by employing Foucault's governmentality perspective. As its empirical material, besides an examination of policy documents, the study utilises interviews with community Water, Sanitation and Hygiene Committees (WASHCOs), *woreda* (district) and regional water officials, private suppliers, NGO representatives, artisans and other actors. As a conceptual contribution, the paper makes power visible in the otherwise depoliticised literature of co-production. For governments and development practitioners, the study urges the opening up of spaces for discussion by showing how the vocabulary of community management can be appropriated to (re)produce power structures.

KEYWORDS: Co-production, community management, governmentality, rural drinking water governance, Ethiopia

## INTRODUCTION

As a concept, community management emerged as an eminent form of rural water governance in the 1980s, during the first UN-declared International Drinking Water Supply and Sanitation Decade. At that point, a demand-driven community-management approach started to gain prominence (Whittington et al., 2009) in response to an increasing dissatisfaction among communities, governments and other sector professionals with supply-driven models. Commonly regarded as an extension of the participatory paradigm from international development policy into the water sector, community-based approaches quickly became mainstreamed into a sequence of policy statements instituting the "global water consensus" (Cleaver and Toner, 2006; Cleaver et al., 2005; UNMDP, 2005). The consensus was grounded primarily on ideas such as community participation, cost sharing and ownership (Cleaver and Toner, 2006). These principles soon became celebrated as a panacea for effectiveness, sustainability and community empowerment and they legitimised a rapid construction of community-managed water points in rural contexts around the world. Despite the surprisingly enduring support and enthusiasm for community management from governments, international donors and NGOs, the approach has not reached its anticipated potential. A generation of scholarship has pointed out the practical and theoretical flaws of community-managed drinking water (Brown, 2011; Chowns, 2014; Cleaver, 1999; Cleaver and Toner, 2006; Harvey and Reed, 2006; Jones, 2011; Meinzen-Dick and Zwarteveen, 1998; O'Reilly and Dhanju, 2012; RWSN, 2017; Whaley and Cleaver, 2017). Rural water points continue to break down before the end of their design period, with more than a third of community-managed handpumps being non-functional at any given time (RWSN, 2017).

In policy and practitioner discourses, the low levels of water point functionality have been attributed to several causes: affordability of maintenance, limited demand or acceptability of water points among communities, changing community-management structures, low technical quality of pumps, environmental issues that lead to the drying up of wells, and weak post-construction support (Harvey, 2008; Koehler et al., 2015; Madrigal et al., 2011). In the past, the need for ongoing post-construction support from governmental or other development actors has materialised in the so called "community management plus" approaches (Baumann, 2006) and the broader movement to create "enabling support environments" that would help communities sustain the use of water points (Lockwood and Smits, 2011). The underlying aim of these sets of supporting practices is to ensure that communities are not left alone without adequate support from governments and other agencies in maintaining and managing water points. In an attempt to acknowledge the joint responsibilities of communities and state and non-state actors, recent scholarly work has started to utilise co-production – instead of community management – as a concept in water governance (see, for example, Ahlers et al., 2014; Hutchings, 2018). This discursive shift relieves the community of some of its responsibility and creates more realistic expectations of community-level institutions (Hutchings, 2018); also, with such a change in vocabulary, mechanisms for holding governmental and other actors to account for their anticipated support become normalized.

This paper looks at community-managed drinking water programmes in the Amhara region of Ethiopia. An early empirical finding in the study revealed that processes of sustained use of water points are very much entangled with relations among communities, governmental, non-governmental and private sector organisations, that is to say among an extended array of actors. Utilising the label of community management and focusing mainly on communities did not correspond to the practices unfolding in the context of this study, even though the vocabulary of community management was prevalent in the interviews and policy documents. The choice to examine community-management programmes from the perspective of co-production allowed for a more pluralist and empirically grounded view of water governance, one that went beyond the binary and normative divides between the state or NGO, and communities (Ahlers et al., 2014). Co-production of drinking water is typically envisioned to take place in a neutralised, collaborative effort between communities and governments or NGOs, in a process that involves user communities at each phase of the implementation; however, such a consensual approach contradicts a long line of research that frames water as inherently political and riddled with power effects (Bakker, 2000, 2003; Budds and Loftus, 2014; Gandy, 2008; Kaika, 2003; Swyngedouw, 1995, 2004). Recognising the political importance of water, the collaborative nature of co-production (see, for example, Farr, 2017) is questioned in this research, as the tensions and power relations among the actors tend to be hidden. The aim of this paper is to examine and make visible power relations that exist among the extended array of actors in co-producing drinking water in Ethiopia, and to examine the potential consequences of such power relations. Specific focus is placed on the community-management discourse and its utilisation in (re)producing power effects. For conceptualising power, Foucault's governmentality perspective is applied, with a focus on governing techniques and the processes through which people govern and freely produce themselves as governable subjects. The attention is therefore on the 'how' question: how power works, between whom, through which mechanisms, and with what kinds of consequences (Foucault, 2010).

The research contributes to the work of illuminating how power is (re)produced through water practices and governance discourses (Bakker, 2000, 2003; Gandy, 2008; Kaika, 2003; Swyngedouw, 1995, 2004), with a specific contribution to the co-production literature. This is undertaken through qualitative interviews and policy documents on community-managed drinking water, focusing on simple technologies such as hand-dug wells and spring-protection developments meant for domestic use of water. The following section presents a literature review on co-production and outlines the theoretical framework of governmentality that guides the analysis of this paper. In the third section, the methodology of this study is presented; this is followed by an analysis of the empirical material. The discourses and practices of community management that are utilised in governmentality illuminate the

power structures that are in play among a variety of actors in the co-production of drinking water. The final section offers concluding remarks and discusses the limitations of the study.

## CO-PRODUCTION AS A POLICY DISCOURSE AND PRACTICE

Since the 1970s, a growing body of research and practice has emphasised the role of citizens in the active joint co-production of public services with state and non-state actors (Alford, 2008 Bovaird, 2007; Joshi and Moore, 2004 Ostrom, 1996; Parks et al., 1981; Stephens et al., 2008). Co-production as a public policy and practice has gained attention as "a process through which inputs from individuals who are not 'in' the same organization are transformed into [the] goods and services" they use (Ostrom, 1996: 1073). Eleanor Ostrom received a Nobel prize for her important work in changing mindsets around the perception of citizens as solely passive recipients of public services; however, after an initial interest in co-production, the concept experienced a steady decline as an academic field of study. The New Public Management paradigm emerged in the 1980s, prioritising efficiency, target-setting, accountability and a more 'business-like' approach; it attracted the interest of researchers and policy makers alike. Recently, however, public policy literature has witnessed a resurgence in attention towards co-production (Alford, 2014; Brandsen and Pestoff, 2006; Osborne 2010; Osborne et al., 2012; Pestoff 2006; Thomas, 2012); this has been partially due to the failures experienced by private sector engagements in public service provision, as promoted in the New Public Management discourse. Bovaird and Loeffler (2012: 1136) framed the silence around user and community co-production to be "one of the best-kept secrets of public governance over the past few decades". As a policy discourse, it is now being 'outed' as a key element in improving public services and identified as an object of systematic management (Bovaird and Loeffler, 2012). Development practices and policies have a long history of involving people as co-producers through participatory governance mechanisms (Joshi and Moore, 2004; Olivier de Sardan, 2011; Ostrom, 1996; Solo, 1999). In 1996, a series of influential articles published during a symposium entitled "Development Strategies Across the Public-Private Divide" (also published in World Development journal, see Evans, 1996) mainstreamed co-production into the realm of development discourse (Ackerman, 2004). Co-production has often been promoted as a normative response to public governance failures in the Global South. The economics perspective suggests that especially poor communities would benefit from co-production, since they are expected to have a lower 'opportunity cost' of devoting time to co-production (Isham and Kähkönen, 1998; Joshi and Moore, 2004). In many countries, weak service provision by the state and issues of affordability increase the desirability of self-help and co-production (McGranahan, 2015; Mitlin, 2008); in turn, communities are arguably likely to get better public service than what they would otherwise be able to receive. Other streams of research promote co-production as a route to participatory democracy and empowerment (Fung, 2004; Ostrom, 2000), greater satisfaction in services (Brandsen et al., 2013), or better service quality (see, for example, Bouchard et al., 2006; Parks et al., 1981). The proponents of co-production argue for its potential to reflect democratic ideals beyond representative government (Bovaird, 2007; Fung, 2004; Ostrom, 2000) as participating in the process of co-producing public services presumes that citizens would have direct control over outcomes.

The positive portrayals of co-production as a new governance mechanism have been contrasted by critical studies examining it at a discursive level. Critics assert that co-production serves at best as an ambiguous and overly consensual approach that can depoliticise access to public services (Eriksson, 2012; McMillan et al., 2014). Even the prefix 'co' in the word itself contains the suggestion of an assumed collaboration and straightforward relations between state and non-state actors. This is reflected in the rejection of politics and power dynamics within the co-production literature in general (Boaz et al., 2016; Donetto et al., 2015; Mitlin, 2008; Ocloo and Matthews, 2016), and the circumscribed participation implicit in the literature in particular (Ackerman, 2004). Scholars have also pointed to the underlying assumption of public governance failure within the co-production discourse (for example, Joshi and

Moore, 2004; Ricks, 2016); the suggestion here is that, through the rhetoric of failure, responsibility for producing public services can legitimately be delegated outside the realm of government and towards the private market and citizens, thereby masking its political aims of neoliberal governance. Co-production has been analysed as reproducing neoliberal free market ideology and as a fix for the consequences of austerity (McGimpsey, 2016), where paid public personnel can be replaced by co-producing citizens (Fotaki, 2015). Another criticism concerns the practical implementation of co-production as a public policy. In that scenario, citizen organisations are often the result of top-down state policies rather than bottom-up organising for public services (Ricks, 2016); the democratising grassroots ideals of co-production are thus called into question. Despite the controversies, different varieties of institutionalised co-production prevail, especially in the Global South where participatory approaches to development – often incited by the international aid community – have for decades been mainstreamed into national policies.

## POWER, GOVERNMENTALITY AND WATER GOVERNANCE

This section comprises conceptual elaborations on how power is understood and analysed in relation to water governance. People's lives, experiences and subjectivities are entangled in the processes of accessing and using water and are therefore affected by power relations that transpire within and through water governance (Stern et al., 2015). As identified by Brisbois and de Loë (2016), water governance draws on several power perspectives, notably those of Foucault, Habermas, Gramsci and Lukes (Behagel and Arts, 2014; Dore et al., 2012; Zeitoun and Allan, 2008). In this study, Foucault's governmentality is chosen as an analytical lens to study how power works: between whom, through which mechanisms, and with what kind of consequences (Foucault, 2010). Governmentality is a useful lens through which to study the dynamics of power relations due to its focus on governing techniques and on the processes through which people govern and produce themselves as governable subjects. It is especially suitable for the study of co-production, as it does not distinguish who is governing whom and thus avoids reproducing dyadic state – citizen divisions; furthermore, governmentality approaches power as a diverse set of power relations between macro political truth regimes and micro practices of individuals (Foucault, 1991). It therefore becomes possible to link macro-level global discourses on neoliberal governance, co-production and community management, with micro-level practices and discourses which shape and are shaped by community members, private sector actors, and governmental officers in the studied context.

The concept of governmentality was introduced by Michel Foucault as a perspective on the constitution of power (Lemke, 2007). Foucault traced historical shifts in the rationalities of states in governing populations, ranging from disciplinary, coercive power to more liberal forms of governance. In more liberal societies, subjects would enter their governable subjectivities freely, giving their consent to reforms and ultimately self-regulating and conducting themselves (see Birkenholtz, 2009). This is the "conduct of conduct" (Foucault, 1975) in governmentality: instead of emphasising the practices of state administration, governmentality focuses on the ways through which political rationalities use explicit, calculated programmes of government to render subjectivities governable and administrable (Dean, 2010). Governance agendas of the state "[enter] the imagination, re-structure the sense of self, and re-direct the practices of willing subjects" (Rocheleau, 2007: 222); governmentality then becomes understood as the organised practices (mentalities, rationalities and techniques) through which subjects are governed (Mayhew, 2004). Foucault emphasised that the conduct of conduct does not transpire through domination and coercive power, but rather requires freely willing and active individuals and communities in order to function; it works through normalising power (Foucault, 1975) that includes processes of both objectivation and subjectivation. Normalising power establishes norms for proper, normal behaviour within which deviant practices are condemned to invoke morality, guilt and self-correction. With objectivation, a subject's deviant behaviour is considered to be an object for

government intervention, whereas in subjectivation the subject would self-correct and self-regulate in order to be considered normal (Foucault, 1975; cf. Cadman, 2010).

In the context of water, several studies have applied a governmentality perspective to water governance (for example, Birkenholtz, 2009; Boelens et al., 2015; Gemechu, 2018; Hellberg, 2014, 2019; Kooy and Bakker, 2008; Rogers et al., 2016; Vos and Boelens, 2018). Looking at water governance through the lens of governmentality has produced analyses on water reforms in various geographical contexts (for example, Boelens et al., 2015; Birkenholtz, 2009; Rogers et al., 2016). Such analyses have documented states' techniques not only in governing water (through, for example, expansion of the bureaucratic apparatus, support of state-convenient market actors), but also on states' attempts to control or co-opt water user groups through water policy reforms (Boelens et al., 2015). States may attempt to gain 'consent' for their efforts to devolve state control through decentralising water governance – as in cases where public awareness campaigns have been used to promote decentralised groundwater conservation (Birkenholtz, 2009), or in normalising water scarcity through the media in order to legitimise state interventions (Hellberg, 2019; Mehta, 2001, 2003). Hellberg's (2019) study in South Africa, for example, showed how 'water scarcity' was used as a physical phenomenon to regulate the poor, conflating the political reasons why poorer people have historically suffered from unequal access to water. Babu's (2009) work on water governmentality in India shows how the state's promotion of active citizenship serves as a governmental technique. Active citizenship discourse works as a rationality of subjectivation, through which communities freely redefine and reformulate their rights as duties, and resistance as ignorance. A separate stream of research has focused on the subjectivation of end users in turning towards market-based solutions and technologies in relation to water problems (Gemechu, 2018; Ekers and Loftus, 2008; Loftus, 2006). These water governmentalities entangle national policy with the need to meet the market needs of international and national investors (Boelens et al., 2015; Birkenholtz, 2009; Hansson, 2014), foregrounding the transnational character of water reforms. In this study, governmentality is used to analyse the practices of conduct of conduct, that is to say the mentalities, rationalities and techniques among the co-producing actors. Such an analysis will shed light on the workings of normalising power in the studied context: how subjects are objectivated, and how subjectivation works, or does not work, through subjects' self-regulation.

## METHODOLOGY

This article draws on interviews with individuals and groups in Ethiopia and on an examination of the country's main policy documents on rural water governance. Qualitative interviews were conducted with 56 individuals or groups, including 27 community organisations (Water, Sanitation and Hygiene Committees), 9 government officials from the Woreda (administrative district) Water Offices (WWOs), 10 spare parts suppliers, 1 artisan association, 1 microfinance representative, and 5 NGO representatives; the rest of the interviews were conducted with individuals at the regional and federal levels (see Annex 1 for all interviews). For the policy analysis, six main water policy documents were studied (see Annex 2) in order to gain an understanding of the policy processes and strategies of water governance in Ethiopia.

At the time of data generation, I had been working for two years in a bilateral development project on community-managed drinking water governance in Ethiopia. Some of the interviews took place in April and May 2013 in the Amhara region and in the city of Addis Ababa while I was still employed by the project; others took place as part of separate field research in February 2016.[1] I chose Amhara as the geographical site for conducting interviews since it is the region of Ethiopia that has the longest (since 1994) and most intensive experience of community water management. In all of the nine woredas visited, community-managed water governance was practised with more or less its intended results; three

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[1] It should be mentioned here that at the time of generating the empirical material, the developments brought by the One WaSH National Programme and the WASH Climate Resilient Development programme were not incorporated into the research.

modalities had been adopted in the districts: Community Managed Projects (CMPs), Woreda Managed Projects (WMPs), and NGO Managed Projects. The woredas were selected based on regional- and federal-level consultations with water sector professionals working on community management, and on the WWO's knowledge of the specificities of the communities and water points. A community was selected, for example, if it practised organised income-generating activities such as selling grass, or if it made use of microloans from the financial maintenance reserve. Such a sampling strategy can be identified as stratified purposeful sampling (as in Patton, 2002), where the first level of the stratified sample is geographical districts (Patton, 2002).

The interviews were conducted in either the Amharic or English languages. I was able to follow many of the Amharic interviews, however a water sector consultant translated the interviews when required. The semi-structured interview guide was designed around questions pertaining to community water management, participatory governance, and maintenance of water points. The interviews were then transcribed, translated and analysed through thematic textual analysis on practices of co-production. I started by analysing the practices of co-production of different actors within the co-production processes, then narrowed the focus to discursive themes of power and resistance in order to build the analytical concepts. Supplementing the interviews, several policy documents (see Annex 2), guidelines and web sites on rural water governance in Ethiopia were studied in detail; moreover, the first field research comprised four weeks of observations, which yielded 84 photographs on water points and 35 pages of field notes. These empirical materials served as background.

Being perceived as a foreign, upper middle class woman influenced my positionalities – and thus the interview situations – in several ways. For WWO officials, I was often regarded as an evaluator, or a channel through which improvement ideas related to the project or claims for better financial employment compensations, could be addressed. This was due to my affiliation with the bilateral project that paid for the individual per diems of WWO staff members and provided vehicles and other material benefits to the water offices. Due to my younger age, gender and ability to have simple conversations in Amharic, however, I was able to have frank discussions with many government officers, something which clearly did not always happen. In the villages, I was generally welcomed with tense curiosity. These tensions were partially caused by my arrival at the village in a federal car, accompanied by woreda-level water technicians. Despite these tensions, interestingly, I was able to have several critical discussions with WASHCO representatives. My presence in the interview situation also facilitated a space where WASHCO members were able to express their independence with regard to the WWO, raise issues of government neglect, or negotiate for benefits; sometimes, however, the interviews became sites for WWO officials to assert their 'expert knowledge' and to explain situations on behalf of WASHCO members.

## FINDINGS

Access to safe drinking water remains a challenge in rural Ethiopia. According to the latest National WASH Inventory (2013) data, the coverage figure for rural water supply was at 49%. Regarding sustainability of the already-constructed water points, the average national functionality rate for rural water supply schemes was reported to be 74% (Butterworth et al., 2013). In Ethiopia, the implementation and overall management of rural water schemes has traditionally been carried out by governmental bodies and by donor and charity projects. In the last few decades, the idea of utilising local resources has shifted the emphasis towards the "active participation" of rural communities in the construction and maintenance of water points (Ethiopian Water Sector Strategy, 2001: 14).

In Ethiopia, community-managed rural drinking water governance was implemented first in the Amhara region in 1994, through a bilateral development programme (Behailu et al., 2015). Since then, the government and international donors have gradually expanded the approach throughout the country. Already in 2001, in line with the global trend towards community-managed water supplies,

Ethiopia was including principles of community management into its National Water Resource Management Policy. Despite the hype around community management, scepticism prevailed among sector professionals on the long-term sustainability of the approach; however, many audiences were convinced by the large-scale experiences with community management in the Amhara region and, in 2013, community management in the form of a Community Managed Project approach became one of the four official rural water implementation modalities in the WASH Implementation Framework (WIF) (Water, Sanitation and Hygiene Implementation Framework, 2013).

Having set the conceptual grounds, in the following sections the perspectives of co-production and governmentality are applied to the empirical case of community management in the Amhara region of Ethiopia. First, the practices of the various co-producers are discussed in relation to drinking water governance; second, the lens of governmentality is applied in an examination of the concept of 'conduct of conduct', through which subjects are rendered governable. The focus is on the processes of both objectivation and subjectivation, as they are part of governmentality's framework on normalising power.

**Practices of co-producing drinking water in Ethiopia**

This section covers the practices of the various actors in co-producing drinking water in the Amhara region; it starts with regional-level actors and then proceeds to other groups of actors. At the regional level, a key task of governmental bodies and NGOs is monitoring the quantifiable metrics of rural water supply. One crucial metric for the purposes of governing is how much the community contributes to the total cash, labour and local materials required for the construction of water points for a community-managed water supply, and what percentage of the necessary regular contributions does it make during the post-construction phase. 'Community contribution' corresponds to the principle of cost sharing within the wider development discourse (Cleaver and Toner, 2006). Other important metrics for the governing bodies include percentages of coverage, fund utilisation, and water point functionality – the former two resonating with the efficiency principle, and the latter with a sustainability discourse. A countrywide statistical investigation into these figures took place in 2013 the last time the National WASH Inventory was conducted. The monitoring of figures is important for the government's state-building efforts, as well as for the international donors; both are required to report progress towards universal coverage of water supply in Ethiopia. Besides their task of monitoring and reporting, the regional actors administer the financial flows from the federal government and wield decision-making power in terms of allocating funds to certain woredas.

For governmental actors at the woreda level, the processes of co-production start with training activities. After participating in regional- or zonal-level trainings (that is, capacity-building activities on the technical aspects of community management), the WWO officials conduct 'awareness-raising' activities in the rural communities. During these events, the officials inform communities about the possibility of acquiring a water point and about the procedures and necessary contributions required for a community-managed water supply. This awareness raising – or information dissemination – is a managerial step in constructing a demand-driven approach; in the process, communities receive instruction on how to officially apply for a water point in their respective locations. Later, the WWOs manage the applications for water point construction that are submitted by rural communities; they also train local artisans and WASHCOs, liaise between microfinance institution (MFI) and the community, monitor the construction process, and actively participate in the post-implementation phase through activities related to the maintenance of water points.

For most communities, the process starts at the awareness-raising event; community members gather for these communication events and organise for the selection of a representative governing structure, the WASHCO. Prior to this selection process, each household must decide whether they want to participate in the construction efforts and whether they will make the financial contribution that is required for most community-managed modalities. Such collective decision-making processes require

time and effort of the organisation's members. In order to align itself with the development policies of most donors, the WASHCO is formed with a female quota. It then files the application and delivers it to the water office, often travelling a long distance to reach the WWO.

After the water point applications from WASHCOs have been evaluated by the WWO and the selected communities decided upon, the WASHCO members participate in trainings organised by the WWO. Topics such as contract management, construction supervision, procurement and water point maintenance are covered in these trainings. In some of the modalities, the WWO officials also then select and train local artisans to do the masonry work for the water points; this is to ensure the availability of skilled masonry workers at a time of heightened demand for construction work (due to the dry season) within a geographical locality. The water experts of the WWO or zonal water department, together with representatives from the community, will then jointly choose a location for the water point; this choice will depend on geological conditions, social desirability and permission from the owners of the land. For this endeavour, the community again organises for deciding upon the location with the WWO official. A simple technology is chosen at this point; whether a spring protection development or a hand-dug well fitted with handpump. At the time of generating the empirical material, most of the donor funding was directed to these simple and arguably outdated technologies (see Bakker, 2012 on the persistence of the global rationale for maintaining the use of simple technologies in rural water governance); despite the will of the communities, possibilities for the construction of deep wells or other more complicated technologies were ruled out. During the construction of the water point, WASHCO and other community members monitor the construction work of artisans or contractors. Formal documents exist to guide this monitoring practice; they specify the recommended daily progress of the width and depth of the well, as well as the quantities of the materials required and artefacts produced. During the construction, community members often do the laborious work of digging the well and of carrying stones, sand and wood; some members cook meals or cater water for the labourers and some travel to towns to procure construction materials. All the efforts are organised within the community, recorded, and reported to the WWO as the community's contribution to the water point's installation.

In the community-managed project modality and in some NGO modalities, the communities enter into a contract with the artisans and often procure all the supplies themselves; in such cases, the WWO will also sign off permission for the WASHCOs to withdraw their financial instalments from the microfinance institution. The WWO typically handles the procurement of handpumps in bulk and advises the WASHCOs on procurement activities by providing price lists and contacts for potential suppliers. Transportation of supplies such as cement, sand, iron bars etc. is all organised by the WASHCOs in the CMP modality. The usage of construction materials is also monitored by community members so as to ensure accountability towards the artisan and the WASHCO.

At the end of the construction phase, WWO officials and WASHCO members assume their new responsibilities. As per the policy, minor maintenance of water points is to be conducted by the trained caretakers of the water points; during the interviews, however, it became clear that, with regard to maintenance, policy and practice do not necessarily go hand in hand. In itself this is not surprising; what is interesting, though, is the variety of power dynamics that exist between the WWO, community members, the WASHCOs, and artisans. Once the water point is constructed, it becomes embedded in the web of differing practices that sustain its functioning. The various actors' interactions and their continued co-production of water depend on the availability of spare parts suppliers, the practices regarding water point maintenance as adapted by the WWO, the ability and willingness of the communities to procure spare parts, and their skills in maintaining the water points. These practices are entangled in the realm of material and discursive power dynamics that will be illustrated in the following sections.

**Governmentality in co-production: Processes of subjectivation and objectivation**

The governance of rural water supply in Amhara region, as described above, is decentralised through a plethora of evolving and fluid processes and discourses among various co-producing actors. These processes are not limited to the traditional governing relationship between WWO officials and communities; rather, they include governance mechanisms between WASHCO members and community members, between WWOs and suppliers, and between WWOs and microfinance institutions. These processes are a mix of technocratic governance practices which utilise the vocabulary of community management as a means to further control communities as well as other actors. What is common in the governing techniques discussed in the following section is their linkages to governmentality's 'conduct of conduct' and to the processes of subjectivation and objectivation, which shed light on the power relations among the various co-producers.

*Construction of the 'non-aware' water user*

One central governance discourse is the sustained attempt to cast community members as 'non-aware'; this is aimed at strengthening the governing position of WWOs vis-à-vis the communities. The term lends itself to the vocabulary of community management, where communities are 'made aware' of their need for clean drinking water through various awareness-raising events.

What emerged during the interviews was the strong motivation for WWOs to blame communities for certain problems, especially their failure to properly maintain water points; a community's ostensible failure to meet this responsiblity rendered it governable through objectivation, thus legitimising the WWO's intervening practices and authority. The community's failure in water point maintenance was often explained through an objectifying 'lack of awareness' discourse. The 'non-aware water user' was constructed as being in need of continuous capacity building and of the WWO's support; this construct gained its meaning in relation to water quality. Clean drinking water was viewed as a crucial part of the modern, hygienic lifestyle narrative; the scientific understanding around clean water was typically framed as something that farmers were made aware of only through governmental interventions; communities needed to be 'capacitated' with the necessary knowledge on the benefits of clean drinking water. Without such capacity building, users would not become aware enough to pay maintenance contributions, construct fences to protect the water point, or engage in other activities that would arguably sustain the water point once constructed. This 'lack of capacity' enabled their categorisation as 'non-aware': they were not scientifically aware enough to recognise the health risks in a water source. In this way, the larger inequalities pertaining to unwillingness or inability to pay for maintenance were transformed into a technical and simplified problem of being 'non-aware'; a problem that called for a governance solution on the part of the WWO:

> Because they cannot afford it! It is real. Even in some communities they cannot afford one birr per month, they are resisting. Actually it is lack of awareness, we have to work a lot to raise the awareness of the rural communities to use potable water rather than to use unsafe water. So we have to work hard. After working hard and after eh… raising awareness of the rural communities we will make the beneficiaries into consumers. (Interview 49: regional WASH government official)

The 'lack of awareness' is further transformed into a lack of need for better technologies and additional water points. Not being aware of the benefits brought by clean water justifies the unequal access to piped water utilities and even access to clean water itself. The Ethiopian Universal Access Plan currently defines water supply access coverage as having access to 15 litres per capita per day (l/cap/day) from an improved water source that is within 1.5 km from the home (UAP I, 2011); for the urban population, the amount is 20 l/cap/day within 0.5 km from home (UAP II, 2011). Communities are not presented as in need of access to water, or in need of a policy change in terms of financing the maintenance of water infrastructure, but rather as requiring a cultural and value change (Mukherjee, 2006); the dimensions through which awareness of clean water is measured, however, fall within the economic and material

rationalities. Controversially, the cultural or value change becomes measurable through the willingness to pay for drinking water: those communities that contribute money and resources to the maintenance of the water point are equipped with 'awareness'. In an incident where the water point breaks down and the community turns to the river as a source of water instead of collecting money to repair it, the community becomes labelled as 'non-aware' with regard to water quality; this is interesting, as the communities have already shown a lot of 'awareness' for water quality by contributing extensively through labour and cash to the construction of water points. From the WWO's perspective, 'non-awareness' only emerges as a construct when it comes to the maintenance of water points. It is at this point that such governance discourse is utilised to construct the communities as being in need of the WWO's governance efforts.

The utilisation of 'non-awareness' as a governance discourse is not limited only to the relationship between WWOs and the communities; it has also spread into the language of WASHCOs, who often described other community members as 'non-aware' for not contributing for water point construction or maintenance:

> Indeed as a committee, it was a tough task to bring awareness into the community on the benefits of accessing sustainable water supply facility, given that many people had no awareness about it. But as I am also part of the *kebele* [village] leadership, I had previous awareness about the benefits. (…). Some people were reluctant to contribute labour through participating in the digging of the well and in collecting stones and other construction materials, fearing that the water harvest might not be found at the end. (Interview 5: Bahir Dar Zuria woreda, WASHCO Chairperson)

This is an example of how governmentality's conduct of conduct can function across hierarchical social structures: WASHCO members become subjects within the non-awareness governing technique, reproducing it in order to expand their own governing position vis-à-vis community members.

*Contested community contributions*

The vocabulary of community contributions encourages other sets of governmentality practices by the WWO in relation to communities. Through water point functionality reporting, the WWOs have the authority to gain information about the maintenance of the water points. This monitoring practice ties the WWOs and communities together even after the completion of the water point construction; it does not, however, end in mere recording of water point functionality: many WWOs have taken it upon themselves to control communities' access to the microfinancing accounts where the community contributions – that is, maintenance savings – are kept. In most cases, the communities deposit cash at a local microfinance institution before the construction of the water point, money which is meant as a reserve for future maintenance-related costs. In many instances, the WWOs have placed themselves as mediators between the community and the microfinance institution; communities then need to ask for the WWO's permission to withdraw money from their savings account, a practice which has caused many communities to mistrust whether they can actually access their savings account at all. For the WWO, such a practice is constructed as a rational governance mechanism aimed at motivating communities to contribute more money for maintenance purposes. This is an instance of governmentality's objectivation and of a government's attempts to make WASHCO members and microfinance institutions governable; ostensibly, deviant behaviour in the form of using the savings only for maintenance purposes – or the fear of such deviant behaviour – has required government intervention in order to properly regulate the relationship between WASHCO and the microfinance institution. As a response to this, many WASHCOs have opted to manage cash contributions on their own and have thus refused the WWO's objectivation.

Among WWOs where the number of water point applications submitted by communities exceeds what the WWO is able to implement, another practice related to community contributions prevails whereby communities are selected based on the amount of their contributions; the greater the contribution of labour, local materials and cash deposits, the higher the probability that a community will

obtain a water point. This can be regarded as a culmination of the demand-driven approach, where communities would need to compete in economic and participatory terms to co-produce drinking water supply. Through a governmentality lens, such a practice is evidence of a community's high level of subjectivation, that is, their willingness to self-regulate in the form of financial contributions; however, such a preferential system runs the risk of reducing communities to merely the source of the materials needed for 'co-produced' projects resources of co-production and shifting the focus away from the political nature of access to water and into the economic realm.

*Governmentality through post-construction support*

The selling and provision of spare parts after the water point has been constructed is an area that ties together WWOs, WASHCOs, private sector suppliers, and artisans. In most woredas, the WWOs hold to a practice of either providing spare parts for free or selling them to the communities; with regard to community-management vocabulary, this is justified in the name of poor availability of spare parts. The potential market transaction depends on whether the WWO has established a revolving fund at the water office and whether they have ordered handpumps with spare part sets that they can either give or sell to the communities. The WWO's influence as a market actor naturally affects the possibilities of private suppliers or artisans for participation in the co-production process. Such a practice does not allow private suppliers to start a business around spare parts, as the WWO governs the market through their already-established relationships with the communities. The rationale for WWOs to sell spare parts is partially justified through the role of the WWO as 'patron' of the community. Many WWOs position themselves as protecting WASHCOs from opportunistic private sector suppliers who would otherwise charge unnecessarily high prices for spare parts; in governmentality terms, private sector actors require objectivation due to their deviant, potentially opportunistic behaviour, and governmental intervention is thus justified. The lack of technical knowledge on the part of WASHCO members also keeps water officials securely in their position as experts; insufficient training on water point maintenance forces WASHCOs to seek support from the WWO in technical questions regarding spare parts.

As the WWO exerts its power over private suppliers through the discourse of poor availability of spare parts, so do the communities hold the WWO accountable in sustaining the use of water points; in many cases, the unwillingness of communities to pay for spare parts results in a situation where the WWO needs to organise free spare parts or come up with new ways to sell spare parts at low prices. Again, through the lens of governmentality, communities do not adhere to the conduct of conduct; rather, in many instances, they reject self-regulation and instead request government intervention. Gaining free spare parts from the WWO, however, was not a practice in all woredas; communities with better financial resources and more efficient water point caretakers took pride in their independence from the WWO in terms of maintaining and sustaining their water points on their own, sometimes involving local artisans and sometimes calling on caretakers from other communities for maintenance work.

*The power of the artisans*

Certain modalities of community management incorporate the training of artisans as local masonry workers to construct rural water points. Equipped with better skills than water point caretakers, in the community-management discourse artisans are also increasingly viewed as a solution to the persisting maintenance problems of water points. The rationale for training local artisans stems from the government's need to create job opportunities at the rural level, as well as from the perceived need to improve accountability mechanisms for the quality of construction. There are often limited grievance channels open to communities who wish to hold external contractors accountable for faulty masonry work or corruptive use of construction materials. The work of artisans from local communities can be better monitored by the community; community members can regularly document and report on the work of the local artisans – a duty for which the subjectivation of communities typically proceeds as per the intentions of the government. Artisans, however, have also formed associations and often refuse to

take over the role of maintaining water points, the reason given by artisan associations being linked to the poor profitability of the maintenance business; another potential reason for local artisans not maintaining water points may be linked to the willingness of WWOs to travel to communities for that purpose and, in the process, collect their per diem; still another reason may be the regular surveillance visits to communities by state officials. In cases where the artisan lives within the community, the responsibility for fixing the wells is often placed on them; artisans, however, also occasionally choose otherwise, instead opting to use their newly obtained skills for work with higher salaries.

> You see, at the community level we are selecting farmers who are interested to work on any water points, whether it would be for the construction or for the maintenance. These farmers that recruited from the communities will be trained as artisans. But sometimes, [after having received the training] they will go to Gondar, to Bahir Dar, to the bigger cities, you know. There they will get paid much more… they will get much money. In the kebele [village] maybe they would get 50 birr per day, but when they work in Bahir Dar city or similar, the salary is 80 birr, 100 birr, like that. (Interview 53: regional NGO representative)

The general discourse around artisans and their anticipated role as suppliers and sellers of spare parts is much promoted at the level of federal and regional policy makers; as per the assumption, artisans would be better to cater to the needs of the communities than to the private suppliers or WWOs located in towns. For the artisans, however, the business does not seem to be of interest, the reasons being their limited availability, the low profitability of travelling to the water points during construction season, and the greater profitability of work in urban areas; it may also be that, because the WWO dominates the spare parts market, artisans do not want to encroach. Whatever the case, it remains to be seen whether WWOs will gain new governance mechanisms to better discipline the artisans; – according to the governmentality perspective, artisans are not subjected to be governable.

*Power dynamics within communities*

For most WASHCO members interviewed, co-production of water points was generally perceived to be a positive change in their villages. During the interviews, the construction process was described as a fairly straightforward, performative action. Historically, there is little state involvement in groundwater supply in Ethiopia, making it a new type of practice for farmers; the role of the state in mobilising rural communities for other labour-intensive tasks, however, is not a new phenomenon in the country. Rural populations are summoned to support environmental governance activities such as terracing and soil erosion prevention, or other developmental activities. Communities are accustomed to paying land taxes and the annual fees of, for example, the Amhara Development Association and the Red Cross. The conduct of conduct can be regarded as rather successful with regard to the construction of the water point, as subjects voluntarily enter their subjectivities as contributing members of the community. The withdrawal of some members during the construction work was attributed to mistrust of WASHCO members or the government, or to the experiences of nearby communities who dug several wells without reaching the necessary groundwater level. After placing considerable amount of work and care into the construction process, the WASHCOs typically viewed the end result of the process as something positive.

> We made our water, health and sanitation demands known to the woreda and received the water point. It was installed at an identified site that suits the needs of women who have to endure the burden of fetching water. Water committee was established, and an annual fee of 10 birr is being charged per each user household. And we pay wages to the guards [of the water point]. We deposit the remaining amount in the bank through the cashier. The community is willing to do so. They have been willing to participate in digging the well on a voluntary basis. They were very much looking forward to seeing the completion of the project, which was highly needed. (Interview 5: Bahir Dar Zuria woreda, WASHCO Chairperson)

After the construction phase, when water points break down, the governance discourse between WASHCOs and community members changes. Within communities, the power dynamics (as perceived within the scope of this study) revolve around the divisions between WASCHO members and other

community members; as mentioned earlier, some of these tensions transpire through the discourse on 'non-awareness'. In addition to the difficulties of collecting regular financial contributions for maintenance from community members, WASHCO members also complained about the mistrust regarding the per diems they received for attending the capacity-building activities organised by WWO; such "misunderstandings" (as described by the WASHCOs) are attributed to the non-awareness of the community members. As a consequence of this mistrust, some WASHCO members had ended up paying for spare parts from their own pockets. In terms of governmentality, this can be interpreted as a failure to render community members governable either by the state or the WASHCO elites. In order to change this, WWO officials and WASHCO members repeatedly stated the need to include all community members in the capacity-building trainings organised by the WWO; it was hoped by WASHCO members that such a practice would further reduce the amount of internal conflict on financial maintenance contributions among community members.

Power dynamics within the communities are also gendered. The policy documents on community management preach the empowerment of women. Through a quota system, women are supposedly well represented in the WASHCOs, constituting three out of five of their members; during the interviews, however, the silence of women was obvious. In several cases, women were not present but were represented by their husbands. A few of the discussions with women and male WASHCO members provided glimpses into the gendered governing practices, showing another type of reality:

> Most of the problems have something to do with the security guard in charge, particularly when they [women who are fetching water] quarrel with him. They [women] complain to the committee, accusing him [the guard] of refusing to let them in by opening the gate on time despite receiving wage, which is alleged to be 100 or 200 birr per month. They are insisting to convene a committee meeting. When I asked them about the reason, they accuse him of favouritism in queue, and indifference towards separating fellow people when quarrelling, and that he is not opening the gate on time. Accordingly, we convened committee meeting upon request, and in the course of the meeting, they demanded that the keys to the gate be given to another person in charge, and we took the keys away from him and gave it to another female replacement in charge. Because females are like-minded to each other, she is opening the gate in time and is performing her duty smoothly. And no complaint has been received afterwards. Just because she is female, they understand each other very well. (Interview 5: Bahir Dar Zuria woreda, WASHCO Chairperson)

The objectivation of women in the above quote is visible, as 'females' are constructed as a group of people requiring an intervention by WASHCO members to solve their water problems. After the ideal solution was undertaken by WASHCO, women would dutifully be subjectivated and thus would self-regulate their activities as per the governmentality approach. As interviews with women and community members were limited in this study, neither a detailed gendered analysis nor an in-depth analysis into the internal power dynamics within the communities was undertaken.

## DISCUSSION

This paper is positioned within a stream of scholarship criticising the theoretical and practical failings of community management in rural water governance. Studies of community-managed drinking water are disposed to take communities or development policies as focal points of study, typically highlighting the multifaceted effects of policies on the lives of community members (see, for example, Madrigal et al., 2011; Mustafa et al., 2016; O'Reilly and Dhanju, 2012). Aligning itself with recent calls to bring about a discursive change from community management to co-production (Hutchings, 2018), in this paper the lens of co-production was used to shift the analysis towards a wider array of actors. The paper showed how community-managed water projects in the Amhara region in Ethiopia are far from being managed solely by the community. I showed how a variety of different actors within rural water governance can be included in an analysis that utilises co-production as a discursive lens; these actors include community

members, members of WASHCOs, government water offices at the federal, regional, zonal and woreda levels, spare parts suppliers, microfinance institutions and local artisans.

Another important tenet of this paper was its focus on water as inherently political and as a site for contested power relations. The aim of this paper was to examine and make visible the power relations among different actors by using Foucault's governmentality as a conceptual lens. Departing from the application of co-production as a depoliticised co-operation between state and non-state actors for the provision of public services (Joshi and Moore, 2004; Lam, 1996; Ostrom, 1996; Tendler, 1997), this study questioned the collaborative nature of co-production (see, for example, Farr, 2017). Not only has power been neglected in the co-production literature in general (Boaz et al., 2016; Donetto et al., 2015; Mitlin, 2008; Ocloo and Matthews, 2016), but to understand the various forms of governance in community-managed water, power has become an important aspect of theoretical focus (Mayo and Moore, 2002). This was undertaken by bringing in a framework of analysis based on governmentality's 'conduct of conduct', and more specifically, on the processes of subjectivation and objectivation among co-producing actors.

The 'conduct of conduct' of governmentality, and the processes of subjectivation and objectivation by which subjectivities are rendered governable, worked on the co-producing actors through different organised practices (mentalities, rationalities and techniques) (Mayhew, 2004). The processes of objectivation, as indicated in this research, included intervening practices when subjects would deviate from 'normal' expected behaviour. For WWOs, co-producing access to water allowed them to use the language of community management to expand their influence on an extended array of actors, including on WASHCOs, private suppliers and microfinance institutions. The WWOs' governmentality practices in relation to communities centred around the construction of 'non-aware communities'. 'Non-awareness' or 'lack of capacity' was a common discourse of objectivation; it allowed for a powerful position to be gained in relation to people who were constructed as inferior, thereby justifying interference and surveillance. The discourse of non-awareness also extended to the vocabulary of WASHCOs in their attempts to reinforce their governing position in relation to community members. Such elite capture of a discourse runs the risk of reproducing already-existing power relations within the user community (Mosse, 2005; Molle, 2008; Mustafa et al., 2016). The WWOs also borrowed another discursive resource from the vocabulary of community management in framing "contribution" as an element of co-production; monitoring contributions became an essential feature of their governing practice, although the communities would typically regulate and govern themselves, especially during the construction of water points. WWOs also control the possibilities and activities of private suppliers in selling spare parts of handpumps to the communities: they act as infomediaries to the communities and govern the need for private sector involvement in terms of selling spare parts or providing them for free.

The subjectivation processes, through which the various actors would freely self-govern, included practices such as communities digging the wells and monitoring the construction work, WASHCO members contributing time and finances in organising maintenance of the water points, and women regulating the use of water points. In several instances, however, the practices of populations and individuals did not proceed in accordance with the plans of public water programmes and strategies, despite government interventions. Local practices of populations were more complex and antagonistic than imagined and expected (Ferguson, 1990; Scott, 1998). In terms of governmentality, the 'conduct of conduct' did not take place as intended. The examples of artisans refusing to conduct maintenance work, communities keeping their savings with WASHCO cashiers instead of with the microfinance institution, and community members refusing to contribute finances for the maintenance of water points can be interpreted as instances where the attempts at conduct of conduct were not succeeding as intended. The reasons for the failed processes of objectivation and subjectivation require further study; there is a need to examine individual subjectivities in order to create meaningful analyses on the failures of governmentality techniques. Such further studies need to investigate the nature of everyday resistance and "counter-conducts" (Foucault et al., 1991; also see Odysseos et al., 2016) performed by the different

actors, as well as the recent changes in the political economy of Ethiopia, developments in the water sector, and their relations to liberal governance. What is interesting, however, is the circular effects of governmentality with regard to resistance. Despite the remarkable work that communities do for co-producing access to water, their role is systematically undermined both in policy documents and in interviews with government actors. The focus is not on what communities *do* for their water supply, but what they fail to do. Instead of viewing WASHCOs and community members as unsupportive of fully embracing community management for fear of a heightened financial burden, because of challenges in reaching consensual practices among community members (Garces-Restrepo et al., 2007; Vermillion, 1991), or for any other reason, this study illuminated how the discourse on 'non-awareness' conflates the community's resistance to render it governable. Refusing to contribute is interpreted as 'non-awareness' by governmental actors.

Why is it important to focus on the power relations between the various actors, except as a conceptual contribution to the co-production literature? For governments and development practitioners, this study provided a pluralist perspective on community management and highlighted the multifaceted power dynamics and frictions that unfold among the co-producing actors. In order to avoid reinforcing and reproducing already-existing power relations among co-producing actors, government actors and development practitioners could pay more attention to the language of community management. The discourses on 'non-awareness' and 'lack of capacity' or even 'capacity building' (indicating that there is a lack of capacity in the first place) invoke appropriation and encourage objectivation, be it unconsciously or consciously. As proposed by Hutchings (2018), perhaps the change from community management to the concept of co-production would promote a sense of responsibility shared between the various actors and would facilitate more equal power relations. The tendency to hold communities responsible for the failures of community management would need to be balanced with a sense of shared accountability. It would be naïve to assume that a change of wording would challenge societal power structures, however it could be a small step in that direction. This is supported by earlier studies which have identified co-production as a political process through which citizens can navigate to initiate changes in their power relations with government agencies (Mitlin, 2008).

## ACKNOWLEDGEMENTS

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## ANNEX

## Annex 1. List of respondents

| Code | Name of the woreda | Type of organisation | Respondent position |
|------|--------------------|----------------------|----------------------|
|      |                    | District/village     |                      |
| [1]  | Bahir Dar Zuria    | WWO                  | Head of WWO          |
| [2]  |                    | WASHCO               | Cashier              |
| [3]  |                    | WASHCO               | Storekeeper          |
| [4]  |                    | WASHCO               | Cashier              |
| [5]  |                    | WASHCO               | Chairperson          |
| [6]  |                    | WASHCO               | Chairperson          |
| [7]  |                    | WASHCO               | Cashier              |
| [8]  | Bure               | WWO                  | Head of WWO, WaSH Coordinator |
| [9]  |                    | WASHCO               | Chairperson          |
| [10] |                    | WASHCO (CMP)         | Chairperson          |
| [11] |                    | WASHCO (NGO)         | Caretaker            |
| [12] |                    | WASHCO (NGO)         | Secretary, WASHCO member |
| [13] |                    | Supplier             | Shop owner           |
| [14] | Dembecha           | WWO                  | Head of WWO          |
| [15] |                    | WASHCO               | 2 WASHCO members     |
| [16] |                    | WASHCO               | 2 WASHCO members and cashier |
| [17] | Derra              | WWO                  | Head of WWO          |
| [18] | Farta              | WWO                  | Water supply process owner |
| [19] |                    | NGO                  | CARE North Gondar Zone Program Office, Construction Supervisor |
| [20] |                    | WASHCO (NGO)         | Chairperson's spouse, caretaker and storekeeper, WASHCO member, user |
| [21] |                    | WASHCO (NGO)         | Chairperson          |
| [22] | Fenote Selam       | WWO                  | Head of WWO          |
| [23] |                    | Supplier             | Shop owner           |
| [24] | Fogera             | WWO                  | CMP Supervisor       |
| [25] |                    | WASHCO               | Cashier              |
| [26] |                    | Supplier             | Shop owner           |
| [27] |                    | Artisan association  | Three members of the artisan association |
| [28] | Guangua            | WWO                  | Head of WWO          |

| [29] |  | WASHCO | Storekeeper |
|------|--|--------|-------------|
| [30] |  | WASHCO | Secretary, two storekeepers, guard |
| [31] |  | Supplier | Shop owner |
| [32] |  | Supplier | Shop owner |
| [33] |  | Supplier | Employee of the shop |
| [34] | Mecha | WWO | Head of WWO |
| [35] |  | WASHCO | Chairperson, guard, 11 users |
| [36] |  | WASHCO | Chairperson, spouse of a WASHCO member |
| [37] | Yilmana Densa | WWO | Head of WWO |
| [38] |  | WASHCO (CMP) | Guard, eight users |
| [39] |  | WASHCO (CMP) | Secretary, user/community elder |
| [40] |  | WASHCO (CMP) | Storekeeper, previous cashier, current cashier |
| [41] |  | WASHCO (CMP) | Chairperson, secretary |
| [42] |  | WASHCO (NGO) | Document keeper |
| [43] |  | WASHCO (NGO) | Chairperson |
| [44] |  | WASHCO (NGO) | Cashier |
| [45] |  | Amhara Credit and Savings Institution ACSI | Branch manager |
| [46] |  | NGO | KfW/GIZ focal person |
| [47] |  | NGO | World Vision woreda office, development facilitator |
| [48] |  | Supplier | Shop owner |
|  |  | **Regional** |  |
| [49] | Bahir Dar | Water Bureau | Amhara National Regional State Water Resources Development Bureau, CMP coordinator and water supply process owner |
| [50] |  | Supplier/importer | Owner |
| [51] |  | Supplier/importer | Regional office manager |
| [52] |  | NGO | Organization for Rehabilitation and Development in Amhara/executive director |
| [53] |  | NGO | Glimmer of Hope/Organization for Rehabilitation and Development in Amhara, WaSH project advisor |
|  |  | **Federal** |  |
| [54] | Addis Ababa | Ministry | Ministry of Water and Energy, Director of Water Supply and Sanitation Directorate |
| [55] |  | Ministry | Ministry of Water and Energy, procurement specialist and team leader on One WASH National Programme procurement |
| [56] |  | Supplier/importer | Marketing manager |

## Annex 2. Water policy documents

| Name of the policy document |
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| Water, Sanitation and Hygiene Implementation Framework, 2013 |
| One WASH National Programme: A Multi-Sectoral SWAp. Addis Ababa: The Federal Democratic Republic of Ethiopia, 2013 |
| The Second Growth and Transformation Plan (GTP II). Draft. Addis Ababa: National Planning Commission, 2015 |
| National Rural Water Supply Operation and Maintenance Management Strategic Framework |
| Universal Access Plan UAP I. Part I, Revised Rural Water Supply Universal Access Plan. Federal Democratic Republic of Ethiopia, Ministry of Water and Energy, 2011 |
| Ethiopian Water Sector Strategy. Addis Ababa: The Federal Democratic Republic of Ethiopia Ministry of Water Resources, 2001 |