

"Filthy Water Cannot Be Washed"

Participation, behavioral change, and the implementation of sustainable handwashing practices in Malawi

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Abstract

This thesis deals with the challenges low-income countries face when working towards reaching the Sustainable Development Goals. The thesis looks into Malawi's capacity to reach SDG 6 "Ensure access to water and sanitation for all," with a particular focus on handwashing. I did this by analyzing policies and strategies made public by the government of Malawi, the United Nations, and the civil society organizations active in the sector. Additionally, I studied the Covid-19 pandemic's effect on handwashing development in Malawi, through an analysis of newspaper articles about handwashing from 2020, as well as interviews with key informants in the field.

The theoretical perspectives used are sustainable development theory, participation theory, and behavioral change. An essential part of the analysis was looking at how the implementers of water projects use these theories in their policies as there is substantial research to prove their effectiveness. The actors involved have varying degrees of success in working together and creating unified policies. Moreover, there is often a gap between the policy and the implementation.

Even when there is positive work being done, the structural issues in Malawi overshadow that work, and ultimately, poverty is the main issue that needs to be addressed before any other development can genuinely make a difference. That being said, the Covid-19 pandemic has greatly influenced the way water, sanitation, and hygiene projects are approached. A significant increase in funding and projects have increased access to handwashing in the cities and in schools; additionally, the promotion of handwashing has changed behavior where access was available.

Keywords: Handwashing, Malawi, Sustainable development, Participation theory, Behavioral change, Policy, Covid-19

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Map of Malawi's Districts:



https://d-maps.com/carte.php?num_car=4780andlang=en

Acronyms and Abbreviations

CATS – Community Approaches for

Total Sanitation

CDC – Center for Disease Control

CIA – Central Intelligence Agency

CIDA – Canadian International

Development Agency

CLTS – Community-Led Total

Sanitation

DFID – Department for International

Development

DPP – Democratic Progressive Party

GDP – Gross Domestic Product

GHP – Global Handwashing

Partnership

GPPPH – Global Public-Private

Partnership for Handwashing

HSSP II – Health Sector Strategic Plan

II

HWWS – Handwashing with soap

IBM-WASH – Integrated Behavioral

Model for Water, Sanitation and

Hygiene

JMP - The WHO/UNICEF Joint

Monitoring Programme for Water

Supply, Sanitation and Hygiene

MDG – Millennium Development

Goals

MFEPD – Ministry of Finance,

Economic Planning and Development

MIWD - Ministry of Irrigation and

Water Development

MoH – Ministry of Health

NCHS - National Community Health

Strategy

NGO – Non-governmental organization

NPC – National Planning Commission

PPE – Personal protective equipment

PRA – Participatory Rural Appraisal

RRA – Rapid Rural Appraisal

SARS – Severe Acute Respiratory

Diseases

SDG – Sustainable Development Goals

SDNP – Sustainable Development

Network Programme

SLTS – School-Led Total Sanitation

SRHR – Sexual and Reproductive

Health and Rights

SWA – Sanitation and Water for All

UN – United Nations

UNDP - United Nations' Development	UNICEF – United Nations Children's
Programme	Fund
UNEP – United Nations' Environmental Programme	WASH – Water, Sanitation and Hygiene
	WHO – World Health Organization

1 Introduction

The statement "Filthy water cannot be washed" is an African proverb that rings true both literally and figuratively in Africa. In the sixties and again in the eighties, my grandfather worked as a water engineer for the Norwegian Agency for Development Cooperation and a private company called *Interconsult* to improve and stabilize water sources in several African countries, including Kenya, Zimbabwe, and Mauritania. Over 50 years later, the water situation in Africa has not improved, and with environmental degradation and shocks to the climate, it is only getting worse. Water is essential for human development socially, culturally, and financially. Water is renewable; however, it is a finite source, and climate change is making it scarcer and more unequally distributed. Therefore, water needs to be a focus as the world moves forward with its global human development goals.

1.1 The Purpose

Water development is often coupled with sanitation and hygiene development as these three are so highly interrelated: you cannot have handwashing without access to water. However, the water aspect gets significantly more focus than the other areas. As much as 66% of Water, Sanitation and Hygiene (WASH) budgets go to water, while only 23% go to sanitation, and as little as 11% to hygiene (Kempster 2017). Global access follows the budget allocations, so about 88% globally have access to safely managed drinking water, 77% to sanitation, and only 67% to handwashing with soap¹ in their homes (UNICEF 2020c). Sanitation and hygiene are equally crucial to the development of the world, but it gets less attention and funding, and is therefore lagging behind. That is why this thesis will focus on sanitation and hygiene.

Sanitation and hygiene are not only about access it is also highly linked to behavior and norms. This means that education, advocacy, and behavioral change are a big part of sanitation and hygiene initiatives. In addition, it is doubtlessly connected to empowerment, dignity, and pride, as well as being a human right. For these reasons, the

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¹ The indicator for hygiene access

inclusion of voicing local opinions in the implementation of development projects is essential for them to be successful. Projects are run by a number of actors, including governments, non-governmental organizations (NGOs), and the United Nations (UN). Their policies and strategies, including local participation and community engagement, are critical for sanitation and hygiene development.

Sustainability is an equally important outcome of the development projects as the initial access. Without it, the money, time, and labor spent go to waste, and the development remains stagnant. Sustainability is a big focus due to the Sustainable Development Goals (SDGs) that the UN published in 2015. One of these goals is SDG 6, which states: "Ensure availability and sustainable management of water and sanitation for all." (UN 2018b, 10). The achievement of this goal is the focus of most WASH projects and policies, and is also the focus of this thesis.

The empirical focus of the thesis is Malawi, a low-income country in Southern Africa. Development is a struggle in Malawi, including sanitation and hygiene development. In Malawi, around 3,000 children under the age of five die every year because of unclean water (United Nations Children's Fund [UNICEF] 2018). As much as 20% of children under five years old who die in Malawi die due to diarrhea, and the average child has diarrhea six times a year (Parkinson et al. 2018). Numerous studies show that handwashing with soap (HWWS) can reduce diarrhea incidents by 39-47% (Fewtrell et al. 2005; Curtis and Cairncross 2003; Ejimot-Nwadiaro et al. 2008).

I aim to explore and analyze issues in WASH governance in Malawi concerning the achievement of the sixth SDG. I wish to do this to highlight and understand the challenges of WASH resources and the relations between the different actors involved. I will particularly focus on the handwashing aspect of WASH as it is extremely relevant today, and finally, I will look into how the Covid-19 pandemic has affected this development.

1.2 Background

The coronavirus identified in 2019 caused a global Severe Acute Respiratory Syndrome (SARS) pandemic in the following years known as Covid-19. Handwashing is an interesting and important study due to its previous lack of attention but recent spur of it, following the outbreak of this pandemic. Malawi is a unique case study in relation to handwashing because of the high lack of access in the country. In this section, I will present a justification for studying sanitation and hygiene, as well as a justification for Malawi to be the case study, before introducing the research question and the thesis outline.

1.2.1 The sanitation challenge

The UN writes in its 2019 progress report on SDG 6 that the rate of progress on this goal needs to double in order for it to be reached by 2030 (Mara and Evans 2018). Currently, 844 million people lack access to basic water services, 2.3 billion people lack access to basic sanitation and 3 billion people lack access to basic handwashing facilities in their homes (UNICEF 2020c). In addition, communicable diseases are estimated to be responsible for 73% of deaths of children under the age of five years old (Burns, Maughan-Brown, and Mouzino 2018) and 88% of diarrhea deaths are associated with unclean water (Center for Disease Control [CDC] n.d.). In the UN's 2018 report on SDG 6, it points out that with the environmental degradation of water we see today, 52% of the world's population will be at risk for water scarcity by 2050 (UN 2018b). Marginalized and low-income countries will be disproportionally affected, perpetuating inequalities (ibid). This means water access is a continuing problem that will worsen in the future if nothing is done.

The financial gain from investing in sanitation is undeniable given all the research that has been done on the cost-benefit of investing. For example, a 2012 study conducted by the WHO, calculated that for every US\$ 1.00 invested in sanitation, there was a return of US\$ 5.50 in lower health cost, greater productivity, and fewer premature deaths (Hutton 2012). Another study from 2007 showed that the return on US\$ 1.00 invested is at a minimum US\$ 5.00 but could be up to US\$ 46.00 (Hutton, Haller, and Bartram 2007). In addition, there are many other studies, both country-specific and global, that

also conclude the investment in sanitation to be beneficial in terms of cost (Curtis et al. 2011; Hutton et al. 2020; Graves et al. 2016).

The Covid-19 pandemic has brought attention to a before underrepresented part of sanitation, namely handwashing. The health benefits of hand hygiene investment are also well proven. The WHO reports that HWWS can cut diarrhea incidents by 50% and respiratory diseases by 25% (Parkinson et al. 2018). Still, 3 billion people lack access to soap and water in their homes. An estimated 900 million schoolchildren (about 50% of the world's schoolchildren) lack access to soap and water in their schools. Additionally, 40% of healthcare facilities are not equipped for proper hand hygiene (WHO/UNICEF n.d.). Several reviews have been done on previous studies for handwashing, and they showed that HWWS consistently reduces diarrhea incidents by as much as between 39% and 47% (Fewtrell et al. 2005; Curtis and Cairncross 2003; Ejimot-Nwadiaro et al. 2008). Clearly, hand hygiene investment is not only cost-effective but also saves lives.

The first records of a soap recipe date back to the ancient Babylonians around 2800 BC (Mortell 2012). It has been developed and used for thousands of years, and there is evidence for its effects through history. For example, during the Black Plague in the 14th century, the Jewish population died at a lower rate than the rest of Europe, and historians believe that this is due to the religious handwashing practices they held (Leighton 2020). There are several other mentions of handwashing in other religious texts, including the Bible and the Quran (Mortell 2012). In 1846, the Hungarian doctor Ignaz Semmelweis studied different death rates at maternity wards and realized it was the uncleanness causing the high death rates in certain wards (Strochlic 2020). He ordered doctors to start washing their hands and tools with soap in between each patient, and the infection rates fell from up to 30% to 1-2% (Mortell 2012). However, he still struggled to get this practice in use because doctors did not want to admit that they had been the ones spreading disease and humans have a continuous struggle with accepting change (Davis 2015). This human behavior tendency of rejecting new ideas regardless of evidence is a common problem; and today, it is known as the Semmelweis reflex because of this incident (Gupta et al. 2020). A 2007 study done in Australian hospitals showed that only 10% of doctors wash their hands between each patient (Gorvett 2020), so even after all the research we have today on the importance of handwashing, it continues to be an issue. Handwashing is thought to be one of the most life-saving inventions in the history of humankind (Gorvett 2020), and with the Covid-19 pandemic, this has only been highlighted, and something needs to be done.

1.2.2 Malawi

The empirical focus of this thesis is Malawi. Malawi is the third poorest country in the world and has struggled to promote economic development (Banik 2018a). As much as 54% of the population lives on under US\$ 1.25 a day, and Malawi is one of the worst performing economies in the world (Banik and Chasukwa 2016). This is surprising considering the fact that Malawi has had peace, political stability, and consistent support for democracy (Banik 2018b), which several scholars have identified as the root for development (Acemoglu et al. 2019; Olson 1993). Currently, the country's population is around 18 million people (The World Bank 2020), and with its high population growth, the country is expected to pass 23 million citizens by 2025 (The World Bank 2017b). There is also rapid urbanization happening, particularly in and around the capital city, Lilongwe. As of 2020, 17% of Malawi's population live in urban areas; however, the urbanization growth is at 4.19%, so that number will increase (Central Intelligence Agency [CIA] 2020).

Agriculture stands for one-third of the national Gross Domestic Product (GDP) and employs about 80% of the population (The World Bank 2020). Even so, there is very little youth in the agriculture industry, which makes youth unemployment an issue (Chasukwa and Chinsinga 2016). Youth unemployment is problematic both because such a large proportion of the population is young and because those individuals represent the future of the country (ibid). The average unemployment rate in Malawi is officially is at 9.3 %, while for the youth,² it is officially at 15.2% but estimated to actually be as high as 82% (ibid). In a country like Malawi where less than 1% of the population attend tertiary education (UNESCO 2011), this unemployment rate is extremely high. In general, there is very little focus on development and poverty

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² 15-29 years old

reduction among the youth in Malawi, and chronic youth unemployment is a huge problem (ibid). Agriculture could be a possible solution as it is the biggest in economic growth and employment, but there is no policy towards engaging youth in agriculture (ibid). Agriculture is also a very water-reliant sector, making the rural areas even more reliant on water stability (ibid). In addition, agriculture is becoming more vulnerable to climatic shocks, as climate change is an ongoing issue (Banik and Chasukwa 2016). Malawi already struggles with droughts and floods, meaning water safety needs to be a priority in the country (The World Bank 2017b). Finally, urbanization's pressure is so large that water scarcity in the cities is also a big concern.

1.2.3 Justification

When it comes to handwashing in Malawi, there is some discrepancy in the statistics. Table 1 has the statistics for household access in Southeastern Africa listed to compare Malawi to the surrounding countries; but first, I will explain the numbers for Malawi in more detail. According to UNICEF (2018), only 10% of the population nationally in Malawi has access to a handwashing station in their household. These numbers are different from those provided by the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP), a database for WASH statistics based on household surveys (WHO/UNICEF JMP 2017a). The JMP (2017f) reports that in 2017, 9% of Malawian households had basic³ access to handwashing. The World Bank supports the JMP statistics. Its database also shows basic access to handwashing facilities with soap at 9% for Malawian households (The World Bank 2017a). However, other sources show different numbers. The religious aid organization Catholic Relief Service provides the number of households with handwashing facilities with water available for Malawi at 13% (Catholic Relief Services 2009). While the number presented in an SDG report from the Malawian government in 2018, is that 10% of Malawian households have basic handwashing access (Ministry of Finance, Economic Planning, and Development [MFEPD] 2018).

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³ The UN defines basic access as "availability of a handwashing facility on premises with soap and water." (UN 2018b, 50)

In order to simplify comparing all these numbers, as well as put Malawi in perspective to other countries, Table 1 compares basic access to handwashing facilities in households in Malawi to nearby countries. The numbers presented come from UNICEF websites, the JMP database, and an NGO evaluation as cited below the table.

Table 1: Handwashing statistics in Southeast Africa

	UNICEF	JMP	NGOs
Malawi	10% ^a	9% ^b	13% ^c
Tanzania	80% ^d	48% ^e	57% ^f
Kenya	14% ^g	25% ^h	45% ⁱ
Zimbabwe	-	37% ^j	37% ^k
Zambia	24%1	14% ^m	26% ⁿ

a(UNICEF 2018) b(WHO/UNICEF JMP 2017f) c(Catholic Relief Service 2009) d(UNICEF n.d.a) e(WHO/UNICEF JMP 2017e) f(Shahidi Wa Maji 2019) g(UNICEF n.d.b) h(WHO/UNICEF JMP 2017b) i(USAID 2014) j(WHO/UNICEF JMP 2017c) k(World Bank 2017a) l(UNICEF n.d.c) m(WHO/UNICEF JMP 2017d) n(Index Mundi 2017)

As seen in the table above, the numbers vary; however, the general trend shows a large gap between the access in Malawi compared to other countries in Southeast Africa. This begs the question: why? Sub-Saharan Africa has the lowest access to handwashing rates globally, and Malawi some of the lowest rates even within the Sub-Saharan context (UN 2018b). This is why Malawi is such an interesting case for this thesis and why there is a need to study handwashing policies in Malawi. The UN states that the SDGs aim to provide countries with a framework to tailor the goals to their own realities (UN 2018c). Therefore, the Malawian government needs to find a strategy to contextualize the goals to the reality of Malawi and, based on research, find a strategy that will best progress Malawi to reach the goals for Malawians.

1.3 Research Question

Based on this brief background and given the importance for Malawi to reach SDG 6, the research question for this thesis will be:

To what extent does Malawi have the capacity to make and implement policies that can lead to the achievement of SDG 6?

I will explore this through a set of related sub-questions:

- 1. How do the government, civil society organizations, and the United Nations collaborate on water, sanitation and hygiene development in Malawi?
- 2. To what extent is sustainable development, participation, and behavioral change theories used in the water, sanitation and hygiene policies?
- 3. In what way has the Covid-19 pandemic response affected water, sanitation and hygiene development in Malawi?

1.4 Thesis Outline

This thesis will consist of six chapters as described below. Together these chapters present the theory, methods, and findings of this project in an attempt to answer the above-stated research questions.

Chapter 1 is an introduction presenting the purpose of the thesis and the research questions.

Chapter 2 presents the theoretical framework used in the thesis, namely sustainable development theory, participation theory, and changing human behavior.

Chapter 3 goes into the methods I used for the thesis, document analysis, and short, indebt interviews while also going over the ethical considerations and challenges I faced.

Chapter 4 is where the analysis starts of the handwashing policy found on the government's, civil society organizations', and the UN's websites and discussing them through the lenses presented in the theoretical perspectives chapter.

Chapter 5 looks at the new organizations and policies that have been involved and published after the pandemic started, comparing it to the previous ones. It also analyzes

newspaper articles from after the pandemic broke out to see the different focus and the effect of the added investment to projects.

Finally, I have a conclusion chapter where I sum up the thesis, discuss the findings, and give recommendations for further research.

2 Theoretical Perspectives

There are numerous approaches to hand hygiene development in low-income settings with different purposes and outcomes. Many development theories have been tested through the years as the sector has evolved and projects have changed. Although, theory and practice are vastly different, it is vital to base development projects on researched theory to ensure efficiency and conservation of moral principles. In this chapter, I will provide an account of the theoretical framework of this thesis and elaborate on the positive and negative sides of sustainable development theory, participation theory, and behavioral change. These are the theories I will use for the analysis of my data, as they are the most used by the actors involved in handwashing development in Malawi. I will explain the history of the theories and how they evolved into what they are today, and what purpose they serve for human development. Finally, I will operationalize the theory and explain how it will be used for this thesis and in the context of Malawi.

I will also present some different approaches within these theories used by studies on hand hygiene development: Community-Led Total Sanitation (CLTS), Integrated Behavioral Model for Water, Sanitation and Hygiene (IBM-WASH), and advocacy. CLTS is an approach to facilitate local communities to do their own appraisal and analysis on sanitation, provoking them to make their own decision to change and take action. IBM-WASH is an approach to understand behavioral determents for handwashing and to analyze qualitative data on handwashing. In contrast, advocacy is the process of influencing decision-makers to support specific actions. These approaches are commonly used in development projects in general and particularly for WASH. This is why they are highly relevant to this thesis as I discuss projects going on in Malawi and which approaches they use.

2.1 Sustainable Development Theory

The need for sustainable development is only increasing as the intensity of our resource use is altering the planet (Klaniecki, Wuropulos, and Hager 2018). Sustainable development can be defined in several ways. The most commonly used definition of

sustainable development is from Our Common Future (1987, 41) or, as it is also known, the Brundtland Report and goes "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This is similar to what Dasgupta (2007, 3) defines it as, namely: "an economic programme along which average well-being of present and future generations, taken together, does not decline over time." The problem with the term sustainable development is that it holds so many meanings and can be defined in many ways by different sectors (Pezzoli 1997). Development alone is defined by the preamble to the Charter of the UN as "a comprehensive economic, social, cultural and political process, which aims at the constant improvement of the well-being of the entire population and of all individuals on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting therefrom." (UN 1986). Then, adding sustainability, which can mean 'uphold the course' or 'provide with the necessities of life' or other things as well, to that already broad definition of development, the term can be seen as ineffectual (Pezzoli 1997). The problem then becomes that it is easily used by all sectors, with their own definition, making it lose its meaning completely (ibid). This is one of the critiques against sustainable development; however, sustainable development has a long history and is an important part of the field, so it is a very useful term as long as it is adequately defined when used.

2.1.1 History

Sustainable development has a more protracted history than many realize. It is a common misconception that 'the environmental movement' started in the 1970s with Earth Day (Pezzoli 1997); when actually, the idea of sustainable development has been evolving for a couple of centuries, starting with the agriculture industry (Shi et al. 2019). Later, Alice Hamilton discussed environmental concerns in her book *Industrial Poison in the United States*, first published in 1925, which started one of the environmental movements (Hamilton 1925). Additionally, there were movements in the past and contemporaneously worldwide (Pezzoli 1997). Earth Day did however, generate increased attention to the issue, and the 1970s marks a turning point for the movement (ibid). The 1972 publication of *The Limits to Growth*, written by the Club of Rome, a group of researchers, industrialists, managers, and scientists from around the world, stated that with the current trend, the limits of the Earth would be reached within

100 years (Meadows et al. 1972). The goal of the report was as stated on page 186: "to provide warnings of potential world crisis if these trends are allowed to continue, and thus offer an opportunity to make changes in our political, economic, and social systems to ensure that these crises do not take place." That same year, the United Nations Environment Programme (UNEP) was created at the Stockholm Conference, and two years later, at the Cocoyoc Meeting, the idea of inner limits⁴ and outer limits⁵ was brought together (Pezzoli 1997). At this time, the environmental concern was the environmental impacts that the economic growth of the post-war era had had on the environment (ibid). This was also a concern addressed in Our Common Future (1987) that stated that governments had to that point been reactive instead of proactive and creating after-the-fact policies for clean-ups rather than preventive measures. Our Common Future (1987) also points to the fact that sustainability is not a fixed, harmonious state, but in contrast, a continuous process that will need political commitment for ongoing research, policy adjustment, and goal setting. The mission of Our Common Future (1987) was to establish a global agenda for achieving sustainable development by the year 2000. Then, as the shift of the millennium rolled around, the Millennium Development Goals (MDGs) were created as the revised way forward before getting to the SDGs as we have today.

The Millennium Development Goals

Global goal setting has been a part of the UN strategy and featured in declarations for decades (Fukuda-Parr 2013). The first UN Development Decade launched in 1961 set goals for growth and development aid (ibid). Dozens of goals have been set since, many of which have had a great influence on campaigns and mobilizing action. In 2000, the UN adopted the MDGs. This set of goals called for a global partnership for sustainable development and the improvement of life quality around the world (Hutton and Chase 2016). The MDGs were self-regulating and meant to encourage nation-leaders to improve on the goals and then show the world their achievements (Fukuda-Parr 2013). They also helped raise awareness outside the international development community, and several businesses were seen implementing the goals in their mission statements (ibid). The UN Secretary General and his advisory argued that having few goals would make

⁴ Meeting basic needs

⁵ Environmental degradation

them memorable and therefore more easily communicated, leading to a stronger influence; in other words, the idea was to simplify the initiative (ibid). Many countries incorporated the MDGs into their own development strategies and made successful progress through the years (United Nations Development Programme [UNDP] 2016). The MDGs wanted to create consensus over specific complex goals in a diverse world; however, there were problems as well. The MDGs were labeled the 'Minimum Development Goals' in several countries in Latin America and Southeast Asia that had already reached several of the goals before their implementation (Fukuda-Parr 2013). This however, also works the other way around, with some countries starting so far behind; they were doomed not to reach the goals before they even started (ibid). There was also a clear urban/rural divide. The urban areas saw far more development than the rural ones did, and almost all countries that made progress on poverty reduction underwent extreme urbanization (UNDP 2016). This is why many argue that the indicators should be the rate of progress and not specific numbers and that the international goal setting needs to be seen as a general framework adaptable to the local context (Fukuda-Parr 2013).

Over the 15 years the MDGs were active, many countries achieved improvements on several MDG targets. The evaluation of the MDGs is mixed, but there is a general idea that they helped raise awareness on developmental issues (Feeny 2020). It is very hard to measure the specific impacts of the MDGs; however, there is a consensus that progress was made: most criteria were on their way to being achieved (Rosenbaum 2015). In Sub-Saharan Africa, progress was five times faster in 2015 than in 1990 (Solberg 2015). However, it is hard to measure progress, and Jacob (2017) found that there were data gaps. Nearly one-third of the goals lack data for more than half the countries. In addition, any of the MDG indicators that were successful experienced accelerated progress before 2000 (Rosenbaum 2015). This is unsurprising as the goals were set based on need; however, it does affect the way we see the progress rates of the goals (ibid). It was essential to establish the shortcomings of the MDGs, as that was the guide for the SDGs. The main challenge was that the progress of the MDGs highlighted the inequalities of the world and which populations got left behind (ibid). This has then become one of the main focuses of the SDGs.

The Sustainable Development Goals

Even though all the goals were not met, the improvement and other transformations in the world meant the starting point of the SDGs in 2015 was completely different from the one for the MDGs in 2000 (Feeny 2020). The SDGs needed to be developed with a new perspective and incorporating the lessons learned from the MDGs (ibid). The MDGs were critiqued for not being ambitious enough, so the SDGs expanded in number and set more bold indicators for their goals. According to UNDP (2016, 24), the main lessons drawn from the MDGs is moving from the what to the how: "how to draw on the comparative advantages of the UN system's diverse areas of expertise, how to work collaboratively and deliver together, and how to work on the continuum from the normative to the operational as a comprehensive and coherent UN effort." It also points to the need for cross-sectoral collaboration and an increased advocacy effort.

The SDGs have also faced critique from the very beginning. Some argue that though the MDGs were not ambitious enough, the SDGs are too ambitious and can create waning enthusiasm from countries feeling unable to reach the goals from the start (Feeny 2020). The cost it would take to achieve the goals has also been discussed as a problem, in addition to possible conflicts between goals such as poverty reduction and conscious production (ibid). As Swain (2017, 5) puts it: "By its very nature economic growth leads to a depletion of natural resources and deterioration of environmental service." In other words, some of the SDGs are at their base incompatible (ibid). In addition, Swain (2017) points to an analysis that showed that some of the goals did not give the most value for money. However, the critiques are surmountable; they just need to be considered in the policymaking, and the UN does state that the goals aim to be aspirational targets that governments can tailor to their own context (ibid). Even though the goals can be seen as inconsistent, it is about how they are interpreted. There needs not to be a focus on consumption-based economic growth but rather an investment in human well-being and environmentally friendly technologies. When it comes to financing, the most cost-effective initiatives cannot always be prioritized as some achievements cost more but are still equally valuable socially and culturally.

Water and sanitation goals and targets in the MDGs and SDGs

Sanitation was first added to the MDG 7 in 2002, and there was a lot of debate around that goal on how to phrase it. Whether to include terms such as sustainable access, safe, and affordable (Herrera 2019). MDG 7c called for halving the number of people using unimproved water and sanitation (Hutton and Chase 2016). The JMP announced the water goal was met by 2010; however, many disagreed with this assessment based on claims of missing data or the flawed definition of 'improved sources' (Herrera 2019). Even if water access was reached by 2010, the sanitation goal was 9% away from its goal in 2015 (Hutton and Chase 2016). With SDG 6, this focus shifted from numerical goals to integrating nature and sustainability into the wording (Herrera 2019). The SDGs reflect lessons learned from the shortcomings of the MDGs by changes such as from improved to safely managed, which is more measurable and has less ambiguity (ibid). The target was also changed from halving the population without access to having access for all (Hutton and Chase 2016). This was because the UN wanted a higher standard for whom its programs reach and because it wanted a focus on sustainability of the development projects set in place (ibid). This reasoning gave SDG 6 the phrasing: "Ensure availability and sustainable management of water and sanitation for all." (UN 2018b, 10).

Sub-goal 6.2 of the 6th SDG states: "By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations" (UN 2018b, 43). It uses the indicator 6.2.1: "Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water" (UN 2018b, 44). By 'handwashing facilities' or 'handwashing stations' it is meant a location dedicated to HWWS and water available on the premises (ibid). This is the definition used by the UN agencies, including the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), and the World Bank, and will also be the definition used in this thesis.

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⁶ These are used interchangeably

The UN focuses on participation and has this aspect as part of its sixth sustainable development goal on water and sanitation. Goal 6.b states "Support and strengthen the participation of local communities in improving water and sanitation management" (UN 2018b, 99) with the indicator 6.b.1: "Percentage of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management" (UN 2018b, 99). The UN also points out the need for more local monitoring, as it is more accurate and context specific (UN 2018c). It highlights that "one of the main differences between the Millennium Development Goals and the SDGs is the opportunity for countries to tailor the goals to their realities (social, political and economic)" (UN 2018c, 9). This shows the awareness the SDGs have for the need of local involvement and context.

SDG 6 was added because as the UN reports: "SDG 6 on water and sanitation provides a tremendous opportunity to accelerate progress on the 2030 Agenda, given the water sector's central role in human rights, poverty reduction, inequality elimination, peace and justice, and the environment." (UN 2018a, 1). This link between SDG 6 and these other social developments is shown through the three principles of integration that the UN looks at when implementing the goals (UN 2018c). These principles are the interlinkage between the goals, leave no one behind, and human rights (ibid).

The interlinkage between SDG 6 and the other SDGs are highly proven. For example, handwashing is the most cost-effective health intervention, which helps goal 3: "good health and well-being." (Moore 2017). Improved health also leads to lower healthcare costs, fewer missed days of work, and poor health perpetuates poverty, so goal number 1 "no poverty" is also aided by handwashing (ibid). Goal number 2, "Zero hunger" is affected by the fact that diarrhea limits the body's ability to absorb nutrition from food, so lowering diarrhea cases through handwashing increases nutritional value, which is an essential part of hunger (ibid). Better hand hygiene makes people less sick, so there is fewer missed days of school providing higher "quality education" (goal 4), especially when considering girls and menstrual health, allowing them to participate in school all four weeks in a month, leading to goal 5: "gender equality." (ibid). In other words, improved hand hygiene can lead to a better quality of life in numerous areas.

The second principle 'leave no one behind' primarily applies to marginalized groups when it comes to handwashing (GHP 2018). The 'no goal should be met unless it is met for everyone' principle is now well established in the rhetoric of the SDGs, but far too little in the implementation (Banik 2019). Marginalized groups need to be included in the discussion and the decision-making process in order for their needs truly to be met and to be in charge of their own destiny (ibid).

Principle number 3 focuses on human rights, and access to water and sanitation was explicitly stated as a human right by the General Assembly in 2010 (Mara and Evans 2018). This was an essential step towards recognizing the need for increased focus on water and sanitation, and it helped lead to 240,000 people receiving improved sanitation each day between 2000-2015 (ibid). However, this progress needs to double to reach the 2030 agenda (ibid), so even though the rhetoric is an important stepping-stone, it still lacks in the implementation. This is why sustainable development still needs to be a focus in research, so it can be continuously improved to fulfill its goals.

2.1.2 Theory

Sustainable development is about finding the balance between three components: growth, distribution, and limits (Borowy 2017). Others call these three economics, social, and environment (Szulecka 2019), but the idea is the same: for there to be continuous growth, distributed equally among the population, but that does not surpass the limits of the Earth. Sustainable development is connected to a green economy, which has the same idea: "green growth can be socially inclusive, pro-poor, and can maximise both immediate and local benefits to reduce poverty and vulnerability and long-term global benefits toward sustainability." (Huff 2015, 270). This idea of a 'triple-win' is challenging to say the least, some would even argue impossible, but that is why sustainable development needs continuous research to improve approaches and strategies around development.

Sustainability is, as mentioned, about the balance between these three pillars, and there are different levels of sustainability. Shi et al. (2019) describe three types: weak sustainability, strong sustainability, and absurdly strong sustainability. Szulecka (2019) on the other hand, gives these different names that offer a different connotation, namely thin sustainability, balanced management sustainability, and two-pillar sustainability. I would like to explain sustainability using these two sources, as they are both recent and based on the same concept; however, they offer very different views on the levels of sustainability.

Weak sustainability sees economic growth as the goal, and as long as that is present, it does not matter which sector it lies in. Thin sustainability is defined as when renewable and sustainable are used as synonyms, which can cause dangerous assumptions that sustainability is implied and oversimplified. Shi et al. (2019) present strong sustainability as a nature-centered view that natural capital has an irreplaceable role in the system of production and consumption. Economic growth is positive as long as it does not surpass the limits of the Earth. This is the type of sustainability the authors favor, and that fits the Brundtland Commission's and UN's view of sustainable development. Szulecka (2019) also points out that balanced management sustainability is the most popular way of seeing sustainability and explains it as sustainability assuring regrowth. Finally, what Shi et al. (2019) call absurdly strong sustainability is the idea of de-growth. Szulecka (2019) talks about this as two-pillar sustainability, which means that the three pillars: growth, distribution, and limits cannot all be achieved. We have to choose two, and the planet will not survive unless growth is the one we choose away, so the author is also here referring to de-growth.

What is interesting in these definitions is that at their core they are the same; however, they are presented very differently. Weak sustainability and thin sustainability are both non-sustainable practices; however, Shi et al. (2019) does not criticize it directly while Szulecka (2019) does. Similarly, with strong and balanced management sustainability, Shi et al. (2019) favor this and therefore present it positively, while Szulecka (2019) is more neutral to this level of sustainability. Where the authors truly differ is in the final type of sustainability. By using the rhetoric 'absurdly strong,' the authors are

completely delegitimizing it when in fact de-growth and post-development are growingly accepted theories that criticize sustainable development for being infeasible and that it is a 'green fix' that still promotes competitiveness and increase consumption (Krähmer 2020). Post-development has also critiqued development approaches for the idea that people are 'underdeveloped' (Ziai 2007). It says that by using this term that development theory is based on, you take away the identity and diversity of over two billion people living in Africa, Latin America, and South Asia (ibid). Two-pillar sustainability takes the level more seriously and presents it as a justifiable concern that these three components cannot work together. However, Szulecka (2019) lay forward a fourth level of sustainability: holistic sustainability. She explains this as a circular economy approach that is based on four criteria: availability, affordability, efficiency, and environmental acceptance.

It is important to note that sustainability means different things in different research and policies. It is an extremely complicated concept to move from a political idea to an operational project. Sustainability in the context of WASH is not necessarily relevant to the capitalistic 'green' production that de-growth and post-development criticize because it is not about extractive over-consumption but a necessity for life. Therefore, even though de-growth is a legitimate critique, it is important to note how sustainability has grown as a concept and that sustainability is the only concept that can be used in relation to WASH.

2.1.3 Sustainable development and WASH

The World Water Council was established in 1996 as an international water policy development team, meant to raise awareness and assist in creating global water policies (Abu-Zeid 1998). Then, in Marrakech in 1997, the *World Water Vision* was developed with a focus on that the world leaders need to make decisions to meet the needs of future generations (ibid). Global water consumption has increased about sevenfold since the beginning of the 20th century, both due to population growth and increased use per capita (Kundzewic 1997). There is already a global water shortage, and with continuous water degradation from climate change and population growth, the problem is only growing (ibid). Water demand is projected to surpass the supply by 40% in the next 15

years, which is why sustainable development within the water sector is so important (Klaniecki, Wuropulos, and Hager 2018). Bagheri and Hjorth (2007) put sustainable development into a water perspective and claim that sustainable development within water systems is too complex to have a singular definition. They quote Cary (2001) by saying: "Sustainability is not a fixed ideal, but an evolutionary process of improving the management of systems, through improved understanding and knowledge." (Bagheri and Hjorth 2007, 145). Again, this points to the need of context specific approaches, strategies, and continuously evolving development.

Water is invaluable physically, politically, and economically and the valuation of water is complicated too because of all these characteristics (Garrick et al. 2017). Water can be a private good, public good, or a common pool resource, so there are complex challenges in ownership as well (ibid). Garrick et al. (2017) claim that the cultural value of water can vary a lot and sometimes exceed the value a framework can manage to estimate. The Ganges River is an excellent example of this. The physical and financial importance of the river is extremely high, but still not measurable with the cultural and religious value. Water management is therefore extremely complex, making it even more important.

Unsustainable water use can reduce economic welfare by depreciating natural capital. For instance, Kansas lost approximately US\$ 110 million per year of capital value from the depletion of its groundwater supply from 1996 to 2005 (Garrick et al. 2017). Similarly, the lack of sanitation and hygiene has severe economic, social, health, and environmental burdens (Hutton and Chase 2016). Two unsustainable WASH practices with significant environmental consequences are the excessive extraction of water and the pollution caused by poorly managed human excreta (ibid). These practices are an ongoing issue that continuously makes WASH sustainability harder. It is a downward spiraling loop, and extensive research and analysis need to be done to turn it around and make sustainable management possible. This means that we not only need sound technical solutions and systems for sustainability in WASH, we also need behavioral change for more sustainable water governance.

2.2 Participation Theory

In 1943, Joseph Schumpeter wrote the very influential book Capitalism, Socialism and *Democracy*. Here, he highlights the idea that democracy is not based on the people's participation but rather on the competition for leadership roles (Schumpeter 1943). This way of seeing democracy became very popular among scholars in the following years (Paternan 1970). The Weimar Republic was based on mass participation, so after its fall leading to fascism, in addition to several post-war mass participation efforts leading to totalitarian regimes all over the world, participation got a negative connotation (ibid). Many scholars called the classic view of democracy 'hopelessly unrealistic,' and it was not until the 1960s that the concept remerged through student demand (ibid). In the 1970s, post-colonial programs were highly criticized for their top-down approach, and at this time, participation entered the world of development (Brett 2003). Through the 1980s, Neo-Liberal Market Theory was the dominating theory, which was based on the idea that market competition in development would lead to individual consumer rights and empower the exploited towards the elites (ibid). In the late 1980s and early 1990s, it was realized that this approach did not meet the needs of the most marginalized groups and that democratic accountability was needed for that, so participation went from being an 'opposition to the elites' strategy to a way of mobilizing communities (ibid).

At this time, the NGOs headed the new approach to participation, and it slowly spread throughout the world (Chambers 1994a). The World Bank (1992, 177) defined participation in relation to development as "a process by which people, especially disadvantaged people, influence decisions that affect them." A common critique of the term, participation, is that it has become a buzzword (Eade et al. 2010). Community participation meant 'do it for yourself' in the 1970s and went to 'do it by yourself' in the 1980s (ibid). Still, the term had a concrete, even controversial meaning; however, now it has been overused and become a vague term that no one can question or critique because it has no proper meaning (ibid). This is why several more specific approaches to participatory development have emerged and why the framework used in development projects is vital to define properly.

Robert Chambers (1988; 1994a; b; c; 2009) was a very influential researcher when NGOs and donors started to base their projects on participation research and methods. Chambers was an advocate for participatory development in general, particularly Participatory Rural Appraisal (PRA). PRA is a growing family of approaches identified by the method of enabling locals to share their own life experience and knowledge and, based on that, take action (Chamber 1994a). It is highly based on the Rapid Rural Appraisal (RRA) approach, which is a reaction to the biased and non-thorough evaluation done by the top-down professionals (Chambers 1994b). The difference is that in RRA, the information is still done and owned by outsiders, while in PRA, it is the local population that owns their own information (ibid). PRA is based on 'reversed learning, '7 crosschecking and progressive learning, and seeking diversity through looking for experiences (ibid). It also involves a focus on personal responsibility and self-critical awareness, meaning that facilitators do a continuous evaluation of their role in the projects and embrace finding errors to fix, as well as sharing information, experience, and knowledge (ibid). This approach has been instrumental in natural resource management. This approach later led Chambers (2009) to research CLTS based on several of the same principles, which I will discuss later in this chapter.

Participation theory has received critique through the years as well. Kothari and Cooke (2001), in their book *Participation: The New Tyranny?* argue that there are systematic issues, which facilitates showing unjust exercise of power in participatory development. They point to two main forms of critique of the approach: the technical limitations of the methodological tools used and the theoretical limitation to the idea itself. They also comment on the dichotomies often set up in participatory development that present good versus bad in a too simplistic way, when relationships between local communities and facilitators/practitioners are very complex. Local knowledge does not need to be exclusive but can be used together with scientific knowledge. Overall, the book claims that participatory development does little to empower the people it means to empower. In addition, that it is more a way to legitimize development projects as a whole, and that it can even be seen as being imposed on people for that reason and not the reasons expressed by the project implementers. This critique is focused on the potential for

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⁷ learning from local knowledge rather than teaching

misusing the concept of participation or in what ways the approach is limited. That does not mean it is a harmful approach, simply that it needs to be well thought through and continuously reevaluated.

2.2.1 Participation, sanitation, and handwashing

In the book *Hand Hygiene: A Handbook for Medical Professionals*, Longtin, Sheridan, and McGuckin (2017, 207) define patient participation in chapter 30 as "a set of behaviors by patients, family members and health professionals and a set of organizational policies that foster the inclusion of patients and family members in improving hand hygiene practices." They also identify some of the common challenges faced with participation, including low patient motivation, low patient ability, caregiver unwillingness to empower patients, and organizational problems. To fully tackle the participation approach, there needs to be a multimodal strategy that encourages participation at all levels (ibid).

Galiani, Gertler, and Orsila-Vidal (2012) found that local level community training was more efficient than mass media campaigns in changing behavior, and they are not alone in this finding. Starkl, Brunner, and Stenström (2013) reviewed 60 water and sanitation projects in Mexico, South Africa, and India after the year 2000 and found that the failures were due to already known factors from the Dublin-Rio principles, such as participation. The projects simply did not account for these factors and therefore failed. Political scientist Kim Yi Dionne, who wrote the book *Doomed Interventions: The Failure of Global Responses to AIDS in Africa*, identifies the lack of communication between project implementers and the local communities as one of the main reasons development projects fail (Banik 2020b).

Over 75% of the countries in the world report having clearly defined policies on community engagement in program planning; however, only 25% report high levels of community participation (UN 2018b). Policies are the first step, but it does not necessarily mean it gets implemented. In its *UN-Water SDG 6 Public Dialogue Report*, the UN states that "governance problems are the root cause of water problems" (UN

2018c, 14). The UN claims that a lack of strong institutions is the key to difficulties with water access (ibid). As there are many actors involved in the water sector, collaboration is essential. Governments, NGOs, the private sector, and local communities are all important stakeholders in the projects (Scanlon et al. 2016). However, miscommunication or lack of cooperation does happen, causing inefficiencies and disputes (ibid). WASH requires participatory approaches because water governance has all these related problems. Community-Led Total Sanitation is a sanitation and hygiene approach that addresses these top-down issues and is commonly used by project implementers.

2.2.2 Community-Led Total Sanitation

Community-Led Total Sanitation (CLTS) can be a great addition to the SDG participation approach. Several researchers experienced that an infrastructure-heavy approach to sanitation might help with sanitation knowledge and access; however, it proved inefficient in changing behavior (Venkataramanan et al. 2018). As a response, CLTS emerged in the year 2000 as a bottom-up approach, counter to the current status quo (Chambers 2009), and is today arguably the leading behavioral change approach to sanitation (Venkataramanan et al. 2018). The idea was to facilitate local communities to do their own appraisal and analysis on sanitation, provoking them to make their own decision to change and take action (Chambers 2009). The facilitators can be NGOs, governments, or international aid organizations, but Chambers (2009) presents it to be no subsidies, no educating, no top-down, and simply empowering. Venkataramanan et al. (2018) disagree. They reviewed 215 documents on CLTS and found discrepancies in the definitions of whether subsidies are a part of CLTS or not. They identified three phases to CLTS: selecting communities, triggering shame and disgust at community meetings, and routine follow-up checks. Chambers (2009) remained favorable to the use of CLTS, saying that there are five major benefits to this approach; the speed of development, the totality, social solidarity, local leadership and self-confidence, and application to other contexts. Crocker, Saywell, and Bartram (2017) on the other hand, claim that many communities return to open defecation after 2-4 years after a CLTS intervention working against it. Venkataramanan et al. (2018) compromise by

concluding that CLTS is an integral part of a larger WASH strategy but cannot stand alone as the single approach.

This use of disgust triggers is very common both in CLTS and IBM-WASH⁸ approaches; however, according to Briceño, Coville, and Martinez (2015), messaging is most effective when it is positive. Their study found that encouraging messages and reinforcing the importance of handwashing was more effective than shame-based advertising. As a result, there was a relative increase in awareness of 128% and the campaign showed an increase in handwashing stations near latrines (Briceño, Coville, and Martinez 2015). The use of positively charged language being the best motivator was also the feedback given in a study by Vujcic et al. (2013) in Bangladesh. Although, Briceño, Coville, and Martinez (2015) did in fact use CLTS as the approach in their study, they simply used positive messaging instead of the common disgust based one. They also paired this approach with Total Sanitation and Sanitation Market (TSSM). TSSM is a demand- and supply-side strengthening approach that attempts to shift the sanitation equilibrium in the targeted area (bid). It uses CLTS to start an increased demand while simultaneously increasing the supply of sanitation goods and services to the local market (ibid). At all stages, reflection on the process is necessary to ensure a successful outcome. CLTS is at its core a participatory approach to change sanitation behavior. Behavioral change is a necessary part of sanitation development, as access is unavailing if no one uses it.

2.3 Behavioral Change

Behavioral change models were originally developed in psychology and have historically been used at individual levels (Sigler, Mahmoudi, and Graham 2015). However, the individual-level focused on personal behaviors and subjective change and it is not until more recently that this approach has been adopted for community development (ibid). In the last couple of decades, the focus has shifted to how individual behavior operates within the social context, leading to community-level interventions from developers (ibid). Klaniecki, Wuropulos, and Hager (2018, 2) claim

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⁸ See next section

that "Curbing unsustainable behavior can reduce the acceleration of environmental degradation and contribute to sustainable development." They back this claim using the example that American household direct emission can be reduced by 20% if behavioral change causes individuals to choose sustainable energy and by 29-70% if Americans choose a sustainable diet (ibid). In other words, human behavioral models can be beneficial for creating sustainable practices.

2.3.1 Behavioral change for sustainable development

Many human behavior models rely on economic theory that assumes that human decisions are rationally based on what is most cost-beneficial (Klaniecki, Wuropulos, and Hager 2018). This is known as Consumer Preference Theory (ibid). However, several behavioral economists have shown that this is not always the case. Information, beliefs, attitudes, social norms, and agency play a role, which is the idea of Social-Psychological Behaviors Theory (Simon 1982). Theory of Planned Behavior on the other hand, says that behavior is a result of individuals' intentions (Klaniecki, Wuropulos, and Hager 2018). It goes on to claim that rational choice is based on three factors: attitudes towards behavior, perceptions of social norms, and perceptions of behavioral control (Ajzen 1991). Theory of Interpersonal Behavior agrees with these three factors but also includes habits to explain why people do not always make the intended decision (Triandis 1977), while Norm Activation Theory adds the feeling of moral obligation as an informant of the norms (Schwartz 1977). Noteworthy is also Focus Theory of Normative Conduct, which focuses on social norms ability to affect behavior depending on the individual's consciousness at the time of the behavior (Cialdini 1990). This is just an overview of some of the commonly used theories and models for behavioral change in sustainability settings, many of which have had good results. However, there are always interventions that fail as well, and it is important to have a large overview of the approaches and contextualize them to the setting and understand that the theory and practice might look quite different.

These theories lack contextuality and people's tendency to make certain decisions based on their societal factors (Klaniecki, Wuropulos, and Hager 2018). That is why many

behavioral change models add the element of external factors to take a more holistic approach (ibid). These behavioral theories talk about why people make certain decisions, which is important to understand when trying to change those decisions (ibid). In general, behavioral change programs for human development should according to Klaniecki, Wuropulos, and Hager (2018, 4) include: "(1) identify and analyze suitable behaviors for change, (2) choose and implement suitable intervention tools, and (3) evaluate the effectiveness of the program." The first step involves finding out what has a considerable impact, that many perform and that people are willing to change. Then the intervention tools need to be tailored to the context of the targeted population and the barriers they face in the wanted intervention. Intervention tools can be informational, structural, or nudges. Then evaluations are key to continue to learn and develop efficient programs. Behavioral change interventions have had successes at governmental, educational, business, and organizational levels; however, there are, of course, critiques as well (Klaniecki, Wuropulos, and Hager 2018). Negative spillover effects can happen when interventions have a counterproductive effect (ibid). The ethics are also discussed; with nudging, the goal is to influence people's behavior without their own awareness, which can be ethically problematic since it is manipulating (ibid). In addition, the effect individual behavior can have on sustainable development has been largely debated among scholars. This is not directly a negative consequence but the real effect of interventions is important to consider when deciding on an approach to a project. Behavioral change models are made for changing the behavior of individuals or communities to better their well-being through their own will. One of these theories related to SDG 6 is IBM-WASH.

2.3.2 IBM-WASH model

The Global Public-Private Partnership of Handwashing (GPPPH) developed the Integrated Behavioral Model for Water, Sanitation and Hygiene (IBM-WASH). The GPPPH uses IBM-WASH to understand behavioral determents for handwashing and to analyze qualitative data on handwashing (Vujcic et al. 2013). It encompasses three dimensions: contextual, psychosocial, and technological, as well as five levels of operations: societal, community, interpersonal, individual, and habitual (Dreibelbis et al. 2013). The contextual dimension is the background characteristics of the setting,

individual, or environment (ibid). This includes socioeconomics, demographics, natural environment, and access to the market. The psychosocial dimension is what most behavioral theories advice, namely the factors that can be influenced by interventions to change behavior (ibid). Typically for open defecation and HWWS is using disgust as a trigger, but other determinants can also include norms, nurture, and illness threats (ibid). Finally, the technological dimension, as explained by Dreibelbis et al. (2013), states that all WASH practices need some sort of technological or physical advancement, and that ease of use can affect behavior. Here is a table to better show the matrix the levels and dimensions create:

Table 2: IBM-WASH Model

Levels	Contextual Factors	Psychosocial Factors	Technology Factors
Societal/ Structural	Policy and regulations, climate and geography	Leadership/advocacy, cultural identity	Manufacturing, financing, and distribution of the product; current and past national policies and promotion of products
Community	Access to markets, access to resources, built and physical environment	Shared values, collective efficacy, social integration, stigma	Location, access, availability, individual vs. collective ownership/access, and maintenance of the product
Interpersonal/ Household	Roles and responsibilities, household structure, division of labor, available space	Injunctive norms, descriptive norms, aspirations, shame, nurture	Sharing of access to product, modelling/demonstration of use of product
Individual	Wealth, age, education, gender, livelihoods/employment	Self-efficacy, knowledge, disgust, perceived threat	Perceived cost, value, convenience, and other strengths and weaknesses of the product
Habitual	Favorable environment for habit formation, opportunity for and barriers to repetition of behavior	Existing water and sanitation habits, outcome expectations	Ease/Effectiveness of routine use of product

Source: Dreibelbis, R., Winch, P. J., Leontsini, E., Hulland, K. R. S., Ram, P. K., Unicomb, L., and Luby, S. P. 2013. "The Integrated Behavioural Model for Water, Sanitation, and Hygiene: a systematic review of behavioural models and a framework for designing and evaluating behaviour change interventions in infrastructure-restricted settings." *BMC Public Health*, *13*(1015).

Deibelbis et al. (2013), argues that theory should derive from practice, transcend the individual level, and be accessible to practitioners. They claim that IBM-WASH meets these criteria and therefore is a good framework to use. Another approach is to try to change the policies and regulations related to the issue at hand. This is known as advocacy.

2.3.3 Advocacy

Advocacy is a frequently used approach together with behavioral change for sustainable development. In this context, advocacy can best be described as "the deliberate process, based on demonstrated evidence, to directly and indirectly influence decision makers, stakeholder and relevant audiences to support and implement action that contribute to the fulfillment of ... rights." (UNICEF 2010). Klugman (2011) works as a freelance strategy and evaluation practitioner and describes social justice advocacy as three possible efforts:

"a) increase fairness in the distribution of resources b) end discrimination against all groups, fostering values that recognize all people as equal c) promote the participation of people in policy and implementation processes that affect their lives, and transparency and accountability for how decisions are made and how they impact on society." (Klugman 2011, 147).

These overlap, and I would argue that all three are relevant to the development of handwashing in Malawi.

The audience also needs to be identified in an advocacy setting. It can be described as "the individuals and groups that advocacy strategies target and attempt to influence or persuade." (Coffman and Beer 2015, 2). Change is the wanted result of development projects through the audience progressing toward a policy goal (ibid). Coffman and

Beer (2015) describe change as a threefold process starting with awareness of the fact that there is an issue, leading to the increased knowledge of possible solutions. Secondly, they talk about will, the audience's wish for change. Finally, they point to action, which is when policy is introduced to improve the issue, and that is where the change can actually happen. Several audiences and steps towards change can be pursued simultaneously; however, studies can also be smaller scale and focus simply on one particular audience or on one point of change (ibid). Therefore, advocacy is very useful in the relation to WASH.

2.3.4 Advocacy, sanitation, and hand wash

The Global Handwashing Partnership (GHP), created in 2001 as a partnership bringing together stakeholders from different sectors on handwashing, points to the importance of advocacy for handwashing (GHP 2018). Most countries have a written strategy on how to target their low-income population for social service provision; however, only 25% of financing is spent on low-income populations (ibid). Marginalized groups are often the ones to suffer from lack of spending, which is true in the case of handwashing as well (ibid). This is why advocacy is so important at all sectors and all levels 10. Advocacy needs to be specified for the audience and the purpose for a full effect (ibid).

Advocacy theory of change is a framework used by many international organizations to measure and demonstrate impact (Glass 2017). Klugman (2011) argues that using a clear-cut theory of change can help ensure that social justice campaigns involve marginalized groups and those who are most negatively affected and are the targeted beneficiaries of the policy. Advocacy theory of change in international development can be used in all sectors; thus, including handwashing. Table 3 is an example from the GHP of how advocacy theory of change in international development can be used in the case of handwashing access in schools:

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⁹ Public and private

¹⁰ Local, national, and global

Table 3: Sample Advocacy Theory of Change

Activity	Output	Outcome	Impact
Inform and engage policy makers	15 meetings with decision makers2 advocacy briefs	Policy makers understand the rationale, need, and impact of handwashing facilities in schools, and have access to expert advice on details of policy.	Policy introduced and passed to mandate appropriate handwashing facilities in all schools.
Mobilize champions to join advocacy efforts	 2 op-eds placed by influential champions 15 champions use social media to promote handwashing in schools 	Champions influence policy makers and raise visibility of issue	
Build public support	• 3 op-eds and 2 radio stories inform public and connect them to ways to take action	Members of the public understand the need for handwashing in schools and pressure policy makers.	

Source: Global Handwashing Partnership. (2018). Clean Hands for All: A Toolkit for Hygiene Advocacy. *Global Handwashing Partnership*.

Theory of change is used by many NGOs to assess their advocacy, to learn how to improve and to demonstrate impact both for their donors and for accountability (Glass 2017). Although there is a general consensus among researchers that advocacy needs to be based on scientific knowledge, there are several critiques of the theory of change model as well (Klugman 2011). Firstly, the fact that change does not happen from a single advocate, but rather a variety of influence along with a window of opportunity (Glass 2017). Furthermore, change is fluid and complex and it is impossible to accurately measure the impact a single advocate has had on a system, public opinion, or policy (ibid). Still, it can be a valuable tool for guiding the setup of projects and for developers to carefully review and consider the outcome of their implementations and adjust their strategies thereafter.

Galiani, Gertler, and Orsila-Vidal (2012) compared the effects of handwashing promotion through a mass media campaign with a local level training program of community agents. What they found was that the mass media campaign did not reach the desired audience. Mass media is mostly used by higher-income groups, who already wash their hands (ibid). The local-level training of community agents and caregivers and at the primary level in schools did have an effect. After the campaign, there was an 8.4% increase in households with water, a 61% increase in people washing their hands before eating, and a 69% increase in handwashing before preparing food (Galiani, Gertler, and Orsila-Vidal 2012). This study did only evaluate over two years, so the long-term effects are still unknown. However, the findings of this study are supported by the Campbell Collaboration Review on handwashing promotion, which states that community-based approaches are more efficient than social marketing campaigns (De Buck et al. 2017). This is not to say community-level training is flawless, it has been critiqued as well and its effects disputed. These studies simply point to a higher effect of their community-based approaches over a marketing strategy.

2.4 Operationalization

This thesis is looking into Malawi's capacity to reach SDG 6 with a specific focus on handwashing and how the Covid-19 pandemic has affected that development. To do this, I will look at projects implemented by the three major groupings of actors in the field, namely the government, NGOs, and UN agencies. As presented in this chapter, the use of the three theories: sustainable development, participation, and behavioral change, is essential to the success of these projects. Sustainable development theory focuses on three concepts: growth, distribution, and limits, where the goal is for development to be equal for all and not exceeding the limits of the Earth (Borowy 2017). Even though the possibility of sustainable development is highly questioned among scholars (Krähmer 2020), it is an idea that has been agreed upon by all the UN members and is used in UN organizations' development projects and therefore has its place in development research.

Participation is also a fundamental but complex human right tied to the democratic process (Mohammad and Farjana 2018) and essential for the collaboration between the

implementing actors, as well as between them and the receiving groups. The idea of participation is for people to have the right to express their viewpoints towards policy decisions and governance (ibid). In their 1990 Global Consultation on the Right to Development as a Human Right report, the UN states that countries have an obligation to have economic, social, and cultural development for all and to do this in a democratic manner (UN 1990). The UN goes on to say how participation is a critical part of democracy at all levels and that: "Special measures are required to protect the rights and ensure the full participation of particularly vulnerable sectors of society, such as children, rural people, and the extremely poor, as well as those which have traditionally experienced exclusion or discrimination, such as women, minorities and indigenous peoples." (UN 1990, 41). As this report goes over, development is also a human right, which we as a global society need to make sustainable to ensure all human rights for future generations as well as the current ones.

The Covid-19 pandemic has drastically changed the world as a whole in the last year; particularly, the focus the global community has on WASH considering handwashing's tremendous preventative effect on the disease. The projects are increasing in funding and size and have been rushed to be implemented in the fight against Covid-19. For these projects to have a longer lasting effect than just helping this particular disease, it is important that sustainability, participation, and behavioral change principles are used. That is why part of my analysis will look into the Covid-19 related policies the Malawian government presented, the projects being implemented as a pandemic response, and what effects these are having. One of the interesting things about Covid-19 is that it in itself can work as a behavioral change driver. Another interesting aspect I will look at is how the messaging uses the pandemic to encourage behavioral change.

3 Methodology

In this chapter, I will go over the case of study as well as the research design and methods. The case is presented through Malawi's political and developmental context, as the thesis aims to look at Malawi's capacity to achieve SDG 6. The research design and methods are a mix of document analysis and online interviews. I will also argue for why I made these choices and explain my research process. I will in addition reflect on the challenges and ethical considerations when using these methods in general and more specifically regarding this specific thesis. Further, I will elaborate on how I attempted to work around these challenges and even use them to my advantage. As this master thesis was written during the Covid-19 pandemic, there are specific restrictions on the methods due to travel bans and lockdowns, which affect how the study was done. I will elaborate on these challenges and how I worked around them to make the best possible research design I could within the circumstances.

3.1 The Case

Case studies are one of the main methods used in social science (Thomas 2011). Case studies vary across disciplines; however, a commonality is a commitment to studying complex, real situation. Case studies do not have one definitive method, but a variety can be used (ibid). A definition of a case study offered by Simons (2009, 21) is "Case study is an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, program, or system in a 'real life context." A case study also needs to be defined by an analytical frame: it looks at a particular phenomenon in a specific setting. In other words, "Case studies are analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more methods." (Thomas 2011, 513). When doing a case study, it is central to establish validity and authenticity. A single case is not necessarily representative of a greater issue, population, or system; then again, it can show trends that are true for a larger aspect, and regardless, knowledge about the case has value in itself. In order to ensure authenticity, it is important to use methods and approaches within certain established theories for the thesis to have consistency with other studies and be able to be backed by them (Sliverman 2001). The validity or 'truth' is determined by the analysis and research design being reasonable for the study (ibid).

The purpose of this thesis is not to test a hypothesis, but rather to understand exactly what the case is and why it is that way. To ensure its validity, I will use both document analysis and interviews as my methods, so the case is seen from several perspectives.

3.1.1 Malawi's political context

The case study of this project is policies and projects that relate to reaching SDG 6 in Malawi. The phenomenon being studied is handwashing projects, and the setting is Malawi in 2020. Malawi has significantly lower handwashing access statistics than its surrounding countries¹¹. This is despite being one of the most stable and peaceful countries in the region. Malawi also has rich freshwater resources with Lake Malawi and several other lakes and rivers throughout the country; however, access to handwashing facilities is lacking. The water sector is heavily understaffed, causing maintenance issues, so existing infrastructure is also declining (MFEPD 2018). Agriculture, a highly water-reliant sector, stands for one-third of Malawi's income, and climate shocks and droughts are making the farming situation difficult (The World Bank 2020). Moreover, rapid urbanization is also pressuring water supply in the cities (CIA 2020).

Water governance and political development

Water governance can be defined in several ways. Rodgers and Hall (2003) define it as the range of political, social, economic, and administrative systems in place to develop and manage water resources and the delivery of water services at different levels of society. While another definition can be the manner in which power and authority are exercised and distributed in society, how decisions are made, and the extent to which citizens participate in decision-making processes concerning water (World Water Assessment Programme 2006). These definitions indicate that water governance is a process rather than an institution and an accommodation rather than a dominant decision, and the water crisis we are seeing in the world today is actually a governance crisis (Chiluwe and Nkhata 2014). No single governance model is guaranteed to work; however, there are certain principles that are considered by scholars essential:

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¹¹ See Table 1

participation, accountability, and transparency (ibid). Poor water laws and policies have greater repercussions for low-income countries than high- and middle-income countries (ibid). This is why proper and effective water governance is so important in Malawi, and basing it on research is what will make it efficient.

Politically, Malawi has been a peaceful country since independence in 1963 and a stable democracy with elections every five years since 1994 (Banik 2020a). Tenthani and Chinsinga (2016) describe Malawi's modern, political history in broad terms in the book Political Transition and Inclusive Development in Malawi - The democratic dividend. After independence in 1963, Malawi had free election with their multiparty system that the constitution guaranteed. The dominant party, Malawi Congress Party, made it a one-party system in 1966 and removed the Bill of Rights taking away the freedom to assemble, the freedom of speech, and serval other rights as well. It quickly became a dictatorship led by Hastings Banda, who removed all opposition for decades, had controversial political ties, used the people as cheap labor, and had very low development. In 1992, there was a new struggle for freedom, and in 1993, Malawi became a multiparty democracy. Today, there are over 50 registered political parties. More recently, a highly contested election held in May 2019 was annulled by the High Court in February of 2020, citing massive irregularities (Banik, 2020a). The Supreme Court upheld the High Court's verdict and fresh elections were held in June 2020 (ibid). The new election was largely peaceful, and the results were not challenged, and this was seen as a democratic victory not only for Malawi but for all of Africa (ibid). However, although this is a victory that should be celebrated, it is important not to forget about the problems that were there before and still exist. This is a positive step in the continuous strive for development.

Democracy and decentralization

Malawi has long had peace, political stability, and consistent support for democracy; still, they are struggling with development (Banik 2018b). Dulani (2016) calls Malawi's democracy stagnant and identifies that as one of the issues with Malawian development. He says that the Malawian population rejects authoritarian governments but lacks commitment to reforms to the current democracy. Africa is in general showing a

democracy paradox where countries with poor democratic institutions are showing further development than those with strong democratic institutions (Banik and Chisinga 2016). Malawi is one of the examples of this with fair and free elections held since the 1990s and still very poor development (ibid). Banik and Chisinga (2016) explain that historically, democracy has proven to be better for development as dictatorships have had great variations in development trends. Many Western aid organizations and aid money have been given on the condition that the receiving countries have free and fair elections. However, recently some emerging countries like China, India, and Brazil are becoming important donors in African aid, and they do not have a democratic requirement tied to their aid money. The democratic development in Malawi created hope for the people that further development in other areas would follow and that Malawi would become a target for Western aid money. However, it has not proven to be true, as inequalities have expanded in Malawi in the last few decades (ibid). They are trailing behind their neighboring countries in all types of development, but especially when it comes to hand hygiene.

Many African countries have been decentralizing to strengthen local authorities, bring the state closer to the people, have more accountability, and deepen the democracy (Chiweza 2016). This is true for Malawi as well that started a decentralization process in the 1990s (ibid). Chiweza (2016) explains that the problem is that it has had the opposite effects, as the local government only became an extension of the central government. The problem financially becomes that the local government sector is financed through central funds and not through district taxes, meaning that their funding is 'watched over' by the central government, and much of the funding is earmarked. In addition, there are problems with the politicization of water, causing some politicians to block development coming from other politicians than themselves (Scanlon et al. 2016). Also, areas with important voter populations get an unbalanced focus for water projects, so politicians can secure votes (ibid). Malawi is characterized by 'clientelism' and 'patronage' because with its voter base, it becomes in the politicians' best interest to serve themselves both politically and financially and through that, their clientele, which again equals political support and reelection (Chiweza 2016). The ruling party focuses on how decentralization can help themselves and use the local funding for very visible development projects and not on what development is actually most needed, again to

gain support in reelections (ibid). Malawi only spends 5% of its government funding on local districts, while the average for developing countries is 22% and for developed countries is 26% (ibid). Decentralization and focusing locally, is identified as one of the key aspects of efficient development, especially in a country like Malawi where over 80% live in rural areas.

3.1.2 Development: funding, actors, and plans

Malawi's government has made several commitments to improving sanitation. Malawi supported both the MDGs and the SDGs, both including sanitation and hand hygiene. In 2008, the Malawian Minister of Irrigation and Water Development, Mohammed Sidik Mia, signed the eThekwini Declaration along with 31 other African countries, committing to at least 0.5% of national GDP be spent on sanitation and hygiene (AfricaSan 2008). Malawi also launched *The Malawi Vision 2020* in 1998, explaining the strategy and goals they had for their sustainable development by 2020 (Malawi Sustainable Development Network Programme [SDNP] 2003). In this plan, there are several goals including water and sanitation; however, hand hygiene is not specifically mentioned.

Actors and investors

Many actors that head projects in Malawi and the national government has made it clear that the other actors are expected to work with the government departments and each other to have the best possible outcome (Scanlon et al. 2016). Malawi relies on aid money, with as much as 40% of its national budget being aid money (Banik and Chinsinga 2016). In recent years, there have been some significant water projects started in Malawi to increase access to water. The World Bank has agreed to finance the Lilongwe Water and Sanitation Project, which is supposed to spend US\$ 102 million for Lilongwe to reach the projected water demand by 2025 (The World Bank 2017b).

In the last decades, researchers have debated foreign aid in terms of objectives, effectiveness, delivery, concrete results, and the relationship between the low and high-

income countries. As previously mentioned, 40% of the national budget is funded with foreign aid, so Malawi is dependent on these policies and programs (Banik and Chinsinga 2016). China has recently become an important actor in Malawi as well, with a non-interferences approach where the idea is that state-to-state relationships should be mutually beneficial to both countries (Banik and Chasukwa 2016). Most foreign aid supports the national budget; however, it has often been frozen or canceled due to corruption or mismanagement (ibid). This has happened several times over the years, especially following 'Cashgate', a big scandal under President Joyce Banda, which involved politicians stealing between US\$ 20-100 million of public funds for themselves (Patel 2016). This number is to the point where the state could no longer provide basic services, and many foreign investors have pulled out due to this or created their own funds or projects to bypass the government (ibid).

China on the other hand, expresses soft power by giving grants, loans, and cultural diplomacy through unconditional aid. African leaders have been very positive to Chinese investment as a friendlier, more flexible, and non-intrusive investment (Banik and Chasukwa 2016). Western Europe and the US have been quick to label these efforts from China as part of their imperialist strategy, a way for them to get their hands on natural resources as well as establish themselves as a world power (ibid). The Global North also claims that these investments encourage Africa to return to an age of dictatorships and bad governance (ibid). Malawi continues to look to China and other donors in the East while some are arguing against it, scared of China's motives and how the deep diplomatic ties they now have with China will affect their ties to their traditional donors (ibid). China has been the largest in the infrastructure sector of Malawi as well as in technical development and company investments, which are very visible to the Malawian public and therefore receive more support in the population (ibid). The Malawian government needs aid and are looking for it wherever they can find it.

Development plans

Malawi has had several development plans since 1964, mostly focused on economic growth (SDNP 2003). The first 'Statement of Development Policies' covered 1971 to 1980, then the second 1987 to 1996 (ibid). Through the 1960s, 1970s, and early 1980s, Malawi had a stable economic growth of 6% (ibid). This rate declined in the late 1980s due to an oil crisis, droughts, and political instability in the region (ibid). In 2019, the economic growth was at 4.4%; however, with the high population growth, the environmental degradation, the vulnerability to weather and health, this is not enough, and poverty is remaining high (The World Bank 2020). To ensure the future stability, Malawi has to make development plans based on sustainability, participation, and behavioral change.

In 1996, Malawi started developing *The Malawi Vision 2020*, which was launched in 1998 and is a long-term, multi-sectoral approach for sustainable development in several Malawian sectors: governance, economics, culture, infrastructure, social sector, science and technology, distribution of income and wealth, food and security, and natural resources and environmental management (SDNP 2003). The Malawi Vision 2020 starts with the mission statement: "by the year 2020 Malawi as a God fearing nation, will be secure, democratically mature, environmentally sustainable, self-reliant with equal opportunities for and active participation by all, having social services, vibrant cultural and religious values and a technologically driven middle-income economy." (SDNP 2003, 13). In 2020 when the timeframe set for *The Vision* was complete, a new Vision was presented: The Malawi Vision 2063. The year 2063 was chosen because that marks 100 years of self-governance for Malawi and the goal of *The Vision* is for Malawi to have sustainable economic independence and not be as reliant on foreign aid as it is today (National Planning Commission [NPC] 2020). In other words, Malawi achieved political independence in 1963 and wants economic independence by 2063. Both these visions were development frameworks with the intention of being overall guidelines for development policies in the country, so more specific development strategies have been presented within the different sectors. For WASH, this was The National Sanitation Policy 2006-2020 and the Health Sector Strategic Plan II. All of these policies will be discussed in the analysis chapter of the thesis.

3.2 Research Design

Given the subject of my thesis and it being an interdisciplinary, social, developmental study, a qualitative approach felt the most appropriate and useful. Not many research guides provide a fixed definition of 'qualitative research,' most offer it simply as the counter to quantitative research or positivism (O'Leary 2017; Seale 2018). O'Leary (2017, 143) provides close to a definition by saying: "It [qualitative research] also strongly argues the value of depth over quantity and works at delving into social complexities in order to truly explore and understand the interactions, process, lived experiences and belief systems that are a part of individuals, institutions, cultural groups and even the everyday." This is highly related to my thesis, as I am looking at the socially complex issue of handwashing and how it affects individuals in their everyday lives through the institutions surrounding them. Qualitative data is about trying to get an intimate understanding of a specific situation or issue (ibid), which I hope to do with the development of handwashing access in Malawi. O'Leary (2017) also points out that qualitative research is more transferable than generalizing, which is what I am hoping to accomplish with this master thesis as well: creating a guide that can be transferred to other context and adjusted accordingly, rather than something generalized as a true overarching finding.

As mentioned, this thesis was written during the Covid-19 pandemic, which highly restricted my ability to travel and do fieldwork, as I will further explain in the next section. Considering the restriction and need for creative data collection, it was natural to explore a mixed methods approach to the thesis. By mixed methods, I am not referring to a mix of qualitative and quantitative research¹²; I am simply referring to using different means of collecting data. O'Leary (2017) argues that creating one's own framework related to the research question enriches the study and makes for a reflexive interpretation. The approaches I will be using are document analysis and interviews, originally meant to be complemented by observation. However, with Covid-19 restriction, it would have been unethical to travel and expose participants to possible sickness and observation was therefore removed as a method. Having fewer methods

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¹² As mentioned this is a qualitative study

will allow me to go deeper into the ones chosen, giving a more in-depth look at my sources.

3.2.1 Scope and limitations

I first started preparing this thesis in the fall of 2019 when pandemics were something that had happened in the past and dystopian fiction. My research proposal included a detailed plan on doing fieldwork in Malawi using various methods including observation, participatory observation, and in-person interviews with several people from different sectors. When the first news of the pandemic broke out, the idea that it would stop me from doing fieldwork was not present in anyone's mind, and a continuous hope for the possibility with just pushing the traveling further and further back and rewriting the research plan went on through most of 2020. During the fall semester, it was clear that the situation was not getting better, and a new research proposal with a new research design was made, changing the setup once again.

When I finally determined there would be no opportunity to conduct the research project I had originally planned and wanted to do, I had to change my research design once and for all. Then I started exploring new avenues to conduct 'social distancing fieldwork.' I decided quickly that my thesis had to be more reliant on preexisting sources than I originally anticipated and changed my research question to be more policy based. I also decided to look into the use of newspaper articles as a way to shed light on ongoing events and the reactions of the Malawian public. In addition, the interview sampling had to be conducted differently, as my access to informants was limited by my inability to go there and meet people. I knew it would be harder to get a hold of interview subjects; in addition, random sampling would be impossible, and I decided the interviews would be more focused on key experts in the field, while the newspaper articles could give insight into the lives of Malawians. Still, I was very excited to explore this new way of doing research, looking into new combinations of methods and ways of acquiring information. As this is a new era we are living in, it is a privilege to be a part of expanding the way we do research and the approaches we take towards accumulating information and conducting a research project. Additionally, I was intrigued by the fact that the pandemic was so relevant to my topic of handwashing and decided that it would be an interesting addition to my thesis to include its effect on my topic. Although the pandemic posed many limitations on my thesis, it also provided a unique opportunity to study its effect firsthand, which has really added to the project as a whole.

3.2.2 Preexisting sources

Several preexisting sources, both primary and secondary, were used for this study. Firstly, I did a literature review of the broader topic that is water and sanitation development. This included reports from the UN, their agencies, and NGOs. In addition, journals and studies about sanitation, hand hygiene, behavioral change, participation, and sustainable development, as well as about the case study, Malawi, were reviewed and considered in the approach to this thesis. I also listened to podcasts and watched webinars on the topic as 'food for thought,' and to be able to engulf myself in the topic more as I could not see it firsthand. With the use of preexisting data, there are advantages and disadvantages. I will not personally taint the data as much with my bias, as my bias can only affect the analysis part (O'Leary 2017). However, it is then important to look for the writer's bias and credibility through asking critical questions in the analysis (ibid). In general, interpretation of a document analysis can be quite subjective, and thus needs to be done systematically and thorough (Seale 2018). Moreover, there is always a risk of the researcher looking for the answers one wants in a text and not the answers that are actually there (Booth, Colomb and Williams 2008). Human nature accepts claims as truth when it fits with what we want to hear (ibid). Therefore, it is important to read critically, be aware of biases, and have a system for analyzing.

I based my first part of the analysis on a structured review of documents available online from the government, civil society organizations, and the UN. The documents include policies, strategies, evaluation reports, website articles, as well as information about the organizations' and the government's structure, partnerships, composition, and role in the sector. This search was done in January of 2021, based on which projects, organizations, and policies had been highlighted in *The Nation*, Malawi's largest newspaper over the past five years (2016-2020). To find these news articles, I used the

keywords 'handwashing' and 'wash hands' as well as some variants of the term like 'hand-washing', 'washing hands' etc. to make sure nothing was missed. This search was on the search toolbar on *The Nation* website. I chose *The Nation* because it is the largest and considered by most Malawians to be the most credible newspaper in the country. The documents were divided into pre and post Covid-19 to be able to compare the differences the pandemic has had on handwashing policies. The dividing date was determined as January 31, 2020, even though Malawi did not have its first confirmed case until April 2, 2020, because the WHO declared Covid-19 as a public health emergency of international concern on January 30, which sparked international investments, policy building, and preparations for the disease.

The websites describing the structure and role of organizations and departments were used to develop an understanding of how the different actors fit into the very complex development sector in Malawi. They were also used to contextualize their policy and strategy documents in time, place, from what perspective they were coming, and the role the documents have in the overall development. Second, I used sustainable development theory, participation theory, and behavioral change theory to analyze the policies and strategies. I looked at the use of these highly globally acknowledged theories in the policies and strategies to discuss the strengths and weaknesses and determine the use of research in the development of the documents. Finally, I used the evaluation reports and research on the sector and on Malawi done by other scholars to evaluate the successes and failures of the policies.

Then for the second part of my analysis, I again used the same theories to analyze the documents from after January 31, 2020. This way, I could see changes in the rhetoric and do the same process with new actors that had not previously been involved with handwashing development in Malawi. I also used the newspaper articles from 2020 as my empirical data to be able to see how these policies and projects play out. When I searched the 'wash hands' and 'handwashing' keywords for 2020, I got 83 of articles. I then filtered them by disregarding the articles that were repetitive or deemed not relevant to the study because even though 'wash hands' or 'handwashing' was mentioned in them, that was not the focus of the article. That left me with 43 articles.

These articles were coded as seen in Table 4 below. Several articles were relevant for several categories, and that is why the total number here will be larger than 43.

Table 4: Coding of Research

Categories	Number of news articles
Education	8
Gender	3
Civil Society	16
Governance	19
Religion	6
Community Engagement	10
Healthcare	12
Preparedness	11
Donation	19

Afterward, I did a small number of interviews with different experts in the field to discuss my finding and help evaluate them.

3.2.3 Interviews

I conducted qualitative interviews with experts within the field for my thesis.

Qualitative interviews include both semi-structured and unstructured interviews, which are both more about having a conversation about the topic to understand better the participant's view of the issue (Kendall 2008). The idea is that semi- or unstructured interviews allow the interviewees perspective to be less tainted by guiding from the interviewer's questions (ibid). However, there is still a problem with the participants understanding what the researcher is anticipating and wanting to satisfy those goals through their response (ibid). Kendall (2008) points out that this is a problem across methods and that all researchers need to be aware of them 'demanding characteristics' from their subjects. She goes on to point out that this is why interviews are often

combined with another method, usually observation. I intended to do this in Malawi, but as fieldwork was not possible due to Covid-19; I combined it with document analysis changing my interview subjects and my angle to the study to a more policy focused one.

I needed to be aware of how the relationship between interviewer and interviewee is affected by their differences. A way for the researcher to close this gap is by emerging him/herself into the participants' world (Kendell 2008). This can be done through both thorough preparation and learning about the interviewee and during the interview, by asking good follow-up questions and showing an understanding for the subject (ibid). As I interviewed experts in the field, it was particularly important that I prepare thoroughly, to have constructive and giving conversations for both my interview subjects and for myself.

I conducted online interviews again since Covid-19 stopped travel and personal meetings. Online interviewing is a relatively new method, and there is limited research on its effects and the differences from in-person interviews. This is a research field that is and will continue to grow in the next few years following this global pandemic. Several researchers have given their experience on it and say that although there are advantages to online interviews, there are cautions too. The results will differ from inperson interviews (Kendall 2008). Textual interviews through email or other online platforms and talking interviews via video chat or phone calls are considered online interviews (ibid). Textual interviews have their own set of restrictions with lack of body language and initial reaction, but I did not do those and will focus on the face-to-face online interview style.

The positives of online interviews are the money and time it saves with less travel. This also allows people who are normally too busy to participate to do so, because less time goes into an online interview than the formalities around meeting in person (Kendall 2008). In addition, some people feel more comfortable with an online interview than a face-to-face one and may for that reason be more willing to do one, or even during the interview be more open about information because of the comfortable environment

(ibid). This may also work opposite, as online interviews require a level of access to and understanding of the internet and technology; some may not be able to participate or feel more uncomfortable doing an online interview (ibid). Finally, Kendall (2008) points out that there is a lack of body language communication through a screen. Even though the interviewer sees the interviewee, the understanding of body language and limited view of it, affects the interviewer's understanding of the responses. I did not have a choice and had to do online interviews, so the best I could do about these limitations was to be aware of them and try to account for them in my use of the information the interviews gave me.

For my interviews I did purposive sampling, meaning that the interview subjects were chosen based on their knowledge (Seale 2018). I wanted experts with different backgrounds to get different perspectives on the issue, so I had interview subjects from academia, non-governmental organizations, diplomacy, and journalism. I was not able to contact government officials due to lack of time for making the right connections to get in touch with them. In addition, because of the immense workload politicians had with the ongoing pandemic, I decided that the chances of getting to talk to someone was too low to spend time on it. I still felt I had a wide representation of subjects from other sectors and with the analysis of government policies, I felt I still had a good view of the water governance in Malawi.

I contacted the interview subjects via email, which I got from contacts through Norwegian academia and the Norwegian Embassy in Malawi. The interviews were done online through Zoom and WhatsApp, I adjusted to whichever platform the interviewee was most comfortable using. The interviews were semi-structured and lasted between 25-40 minutes each. All in all, I interviewed six people where I on beforehand gave some information about my thesis and what I had found, so they could offer their perspective and knowledge on it. I stopped at six interviews because of time constraints and because at that point, I had an adequate amount of information considering that document analysis was my primary source of data. All the interviews were transcribed afterward, and to ensure anonymity, the interview sources will only be referred to by

their profession or position in the development context in Malawi. The interview data storing was done within the guidelines of the Norwegian Center for Research Data.

3.3 Challenges and Ethical Considerations

Firstly, it is important to acknowledge the biases I have as a researcher because of my background shaping my interpretations and views of the world. This is true for every researcher, but it is still important to acknowledge and be aware of. Both to try to be as objective as possible, as well as give the reader the opportunity to know how to review my research critically. I am born and raised in Norway but have also lived in the United States and Canada. My educational background is in International Studies and French Studies, so I have a political science guided view on doing research. I had no prior background knowledge about sanitation or Malawi. I therefore tried to come into this thesis with an open mind and to learn through the process and let that guide me through the whole thesis with as little prejudice as possible.

The Norwegian Centre for Research Data approved this thesis and the information and interviews are stored and anonymized in agreement with their guidelines. Looking back at the social distancing fieldwork, the interviews are what posed the greatest challenges. Firstly, all of them being done online has its own implication with body language and the way we interact differently through a screen. In addition, there were some issues with poor connections while doing some of the interviews and three of them had to be done without a camera on because the signal would not allow it. Phone interviews are still an excellent source for data; however, it does change the dynamic of an interview, especially considering I was planning on doing a video one, and it was on-the-day circumstances that changed the plan. The internet connection issue also caused some disruption during the interviews and some time lag in the talking, making it harder for the conversation to flow naturally. Still, the interviews proved very useful, and they were handled professionally and with understanding from the interview subjects.

Although the main challenges were with the interviews, the preexisting texts also had some considerations. Many of the government websites for Malawi were either not

updated or under construction and therefore not available. There was also some inconsistencies in the information from the different actors, which will be further discussed in the analysis of the thesis. Overall, considering the limitation and challenges I faced through this master thesis and the changes I had to make throughout, the data collection and writing went well once it was planned in accordance with the restrictions.

4 Water, Sanitation and Hygiene Development Policies in Malawi: How to Reach SDG 6

There are three major groupings of actors in WASH development policies in Malawi. These are the government, civil society organizations, and the UN. The private sector and other countries are also somewhat involved, but that is through donations, collaboration, and contracts with the main actors. The government, civil society, and the UN also work together on several projects and on having closely related policies and strategic plans to follow. However, they are separate entities with separate goals, policies, and projects. In this chapter, I go over the main ones within each entity and how they work together. I also comment on the structure of the government ministries and departments, as well as compare the most involved NGOs and discuss the UN's role in this sector. Furthermore, I look at the research questions from a pre Covid-19 standpoint, talking about the WASH policies, how the actors collaborate, and what theories they use in their implementation. Then in the next chapter, I will look at how the Covid-19 pandemic has affected these questions and through that also the general WASH development in Malawi.

4.1 WASH Governance

WASH governance is exceptionally intricate in Malawi. Firstly, there is a great deal of confusion with who has jurisdiction over what aspects of WASH, and different government websites and documents give different information. Many of the websites either have not been updated or are under construction; and therefore, information can be hard to find or determine accurately. After doing extensive research, I have managed to figure out the tentative setup but it is important to note that there are ongoing discussions about which ministry should be responsible for what and the lines are not clearly set. These complexities in the structure are important to understand to properly examine the challenges Malawi face with governance. Therefore, I will start this chapter with presenting the indefinite structure of the water governance in Malawi.

4.1.1 Government structure

Malawi has two government ministries that work directly with WASH: The Ministry of Irrigation and Water Development (MIWD)¹³ and the Ministry of Health (MoH). The newest government website is currently being created and therefore cannot be accessed, but the 2013 website of the MIWD explains that it is divided into five departments, one of which is the Department of Sanitation and Hygiene (MIWD 2013). Handwashing is in the responsibility of the Department for Sanitation and Hygiene: "handwashing at all functions, private or public, where food is provided" (MIWD 2013, para. 9). However, the system has changed since this website was updated. The MIWD is still responsible for water supply and sanitation services on a national level. The Water Supply and Sanitation Department oversees sector policies, sets technical standards, and trains communities in water supply management (Inter Aide 2015). The difference is that now, sanitation and hygiene is the responsibility of the MoH, separated from the water supply management (ibid). To simplify, here is a figure to show the different ministry and department responsibilities:

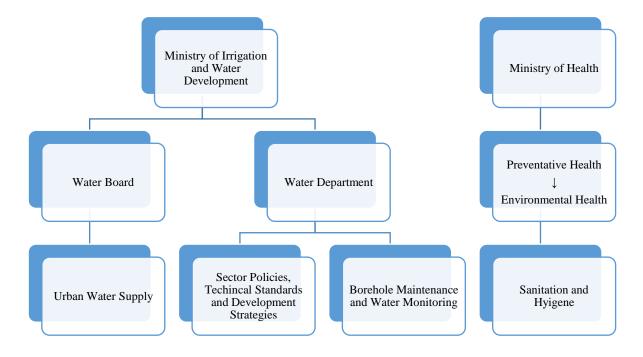


Figure 1: WASH Responsibilities in Malawi

¹³ Sometimes known as the Ministry of Agriculture, Irrigation and Water Development or the Ministry of Agriculture, Irrigation and Food Security

The MoH has many directorates, including Preventative Health. The goal of this directorate is to lessen the burden of the preventable, treatable, and communicable diseases on the health services (MoH 2016b). The department is divided into units: Environmental Health, Primary Health Care, Health Reference Laboratory, Epidemiology Unit, Public Health Institute of Malawi, Health Education Services, and Preventative Health Programmes (ibid). The Environmental Health Service Section has the responsibility of sanitation and hygiene services and lists it as one of their priorities (MoH 2016c). On the same page, it writes: "The vision of the Environmental Health Services Section is to have a healthy Malawi free from environmental health risks." (MoH 2016c, para. 3) and their mission statement as: "To improve the health status of all people in Malawi by creating an environment free from environmental health risks through the provision of environmental health services offered by committed environmental health officers and other players." (ibid, para. 4). This vision and this mission are only possible through the investment in WASH.

4.1.2 Previous policies

Chiluwe and Nkhata (2014, 317) point out that "Good water laws and policies cannot achieve the intended objectives if they are not backed up by necessary strategies that can translate them into actions." In an interview I conducted, a political scientist pointed out that Malawi is satisfactory at writing sensible, thorough policies; however, the implementation is where it is lacking. Malawi has had many overarching development plans; more recently, that has been *The Malawi Vision 2020* and then *The Malawi Vision 2063*. Several interviewees pointed to these just being dreams that no one truly believes in, but they still represent the ambitions of Malawi at those times. This is why I will look at the evolution of these documents and discuss their use of sustainable development, participation, and behavioral change theories. As mentioned, these are just overarching policies; so additionally, I will assess the more specific health and sanitation policies.

The Malawi Vision 2020

The Malawi Vision 2020 has many focus areas, including sanitation; however, no mention of handwashing. There are sections on cultural practices that enhance health,

water infrastructure, nutritional value, and diarrhea prevention, all of which hand hygiene can aid immensely. When looking at nutrition, there is a reasonable strategic focus on local knowledge, local ownership, irrigation practices, and female participation; however, the priority focus on sanitation and hygiene is equally if not more important than agriculture and food security. Regardless of the lack of hygiene policies, I will discuss the framework of *The Vision* to some extent as it represents the government's overall wishes for how development should take place in the country.

The Vision describes development as social, cultural, political, technological, and economic change. Lessons learned from the past show that simply focusing on economics does not work and that it needs a multi-sectoral approach. It was written by the Economic Council in Malawi and therefore has a large industry and economic growth focus. It puts forth participation as the framework and explicitly mentions participation in the mission statement: "Experience has shown that lack of popular debate over national development policies and implementation impose severe constraints on motivation for high productivity." (SDNP 2002, 16). It goes as far as saying: "The success of The Vision depends on the public's awareness of their responsibilities to achieve The Vision." (ibid, 16). It really highlights Malawian's participation in coming up with the strategy goals and claims that Malawians came up with the mission statement. However, throughout the rest of the strategy explanations for the specific policies, there is a lacking focus on participation.

The Vision also lacks a focus on sustainability. Sustainability was not originally a part of the wording in the preliminary mission statement. It was added later when they changed the original wording of competitive economy to 'sustainable economic growth and development.' So most of the sustainability focuses on economic development and not on environmental sustainability, and since sustainability became more and more of a global focus at the time and it is likely that the Economic Council felt the pressure to add this wording from the international community rather than from their own prioritization.

Finally, I would like to mention that *The Vision* also has an interesting take on the cultural aspect of engaging Malawians. Religion has a very prominent role in it, starting with the mission statement calling Malawi a God-fearing nation with religious values. Religious leaders get brought up as an important part of setting an example for national pride and the ethics on issues raised in *The Vision*. Malawi gets described by *The Vision* as being unethical and immoral, and increased religious education can lead to cultural change. Behavioral change is complex and hard to do, as the theoretical section shows, so a religious approach can be a helpful component.

The National Sanitation Policy 2006-2020

Even though *The Vision* itself lacked in sanitation and hygiene policies, as a supporting strategy for reaching *The Vision*, the MIWD¹⁴ created what it called *The National Sanitation Policy* in 2006. It was a policy with goals, strategies, and evaluations for sanitation and hygiene meant to help reach the MDGs and *The Vision*. The policy was based on research done all over Malawi in both rural and urban areas. The policy has a vision of making Malawi a country with access to improved sanitation, safe hygiene behavior as the norm, and recycling of solid and liquid waste to create a better and healthier life for all Malawians.

Handwashing is extremely central to the policy. The handwashing goals are set as defeating water-borne diseases such as diarrhea and cholera by achieving universal practice of HWWS at key times, including after defecation, after handling infants' feces, before preparing food, and before eating. The strategy to do this is by changing handwashing norms in rural areas, urban areas, and towns by having access in homes, schools, religious buildings, healthcare facilities, markets, and other public places. The behavioral change is meant to happen through participatory education at schools. There will be one health teacher per school that uses participatory methods to teach pupils about the importance of sanitation and hygiene with a special focus on women's health. The hope is that the students being taught will not only benefit the students themselves and their future norm, but that they can also bring this wisdom home and the norm will spread through the communities. For this policy, there was invested US\$ 29 million

¹⁴ Who then was in charge of sanitation and hygiene

over the 14 years by the World Bank, the Canadian International Development Agency (CIDA), UNICEF, and Unilever.

This policy mentions participation approach, it talks about behavioral change, and the need for sustainability; however, it is not very detailed in how the strategy is going to be performed. This is probably because each community, city, or town need to develop their own local context specific strategies. Even so, it is concerning that the specific sanitation and hygiene policy within the overarching *Malawi Vision* is still this vague in goals, policies, and strategies.

4.1.3 Current policies

As we have passed 2020 and the end of both the Malawi Vision and the National Sanitation Policy, an evaluation can be done on their success or ability to reach their goals. Malawi hoped to be a middle-income country; however, they are still the third poorest country in the world (Banik 2018a). The National Sanitation Policy 2006 presents the handwashing numbers as 75% of households have access to HWWS while only 45% use it, saying that behavioral change is the problem. In 2020, the health minister claimed that 36% of Malawians have access to HWWS while only 11% use it (Sabola 2020). This was also to say that behavioral change is an immense problem; moreover, it also points to that by their ministries' own claim, access has fallen with 39% and usage with 34%. Moreover, in their 2018 SDG Progress Report, the government says that only 10% have handwashing facilities in their households (MFEPD 2018), so the numbers do not match. The MoH identifies several problems from previous health policies, including resource constraints and inconsistency in quality. Decentralization and local participation are said to be the main strategies in *The* Vision 2020 and the National Sanitation Policy 2006; however, the MoH explains that this has been challenging due to struggling coordination between the government and other partners, fragmented data collection, and the lack in sustained engagement (MoH 2017a).

Health Sector Strategic Plan II and the National Community Health Strategy

In 2017, the MoH published the Health Sector Strategic Plan II (HSSP II), following the end of the first one in 2016. The HSSP II builds on the achievements of the health MDGs and makes a new plan for how to continue working on the health-related SDGs. As the document points out, this is not only SDG 3 about health and well-being but also the closely related ones like SDG 4 on education, SDG 5 about gender equality, and SDG 6 on water and sanitation (MoH 2017b). It is drafted based on the Director of Planning and Policy Development's analysis of the root causes of poor health outcomes and health care system challenges in Malawi (ibid). The MDG success evaluation done in the HSSP II goes over combating different diseases, reducing child mortality, and improving maternal health; however, it does not go into the sanitation goal (ibid). It lists communicable diseases, including diarrhea, as the leading causes of Disability Adjusted Life Years, and still only once is HWWS mentioned as a needed measure (ibid). Hygiene is prominent in the policy and related to community education, sanitation promotion, handwashing promotion, community health services, food safety and nutrition, and finally, healthy food handling. These are all highly relevant and extremely important; however, they are merely mentioned in sentences, and there is no actual strategy for their implementation.

In line with HSSP II, the MoH has developed the first *National Community Health Strategy* (NCHS), recognizing the importance of having a local focus on health and that community participation is the best way to reach the health-related SDGs (MoH 2017a). The entire strategy is based on the idea that decentralization and participatory health is the most efficient way to reach universal, culturally acceptable healthcare (ibid). Many of the reoccurring problems related to community engagement in the health sector are addressed in the NCHS and the strategy set forward is clear. Understaffing is an issue that is mentioned and that is so bad, that the goal here is only to reach 74% of the necessary healthcare workforce by 2022. It also highlights wanting a local staff to each local health center and for the local health centers to be the primary health facility, while regional and central hospitals work as referral sites. The main goal of this strategy is to bring health down to the local level, and that is extremely important for the success of the SDGs.

The goal set for the NCHS and the HSSP II is as mentioned reaching SDG 3 'good health and well-being.' This as well as the SDG framework of the relations between the goals, leave no one behind, and human rights is clearly stated. As previously discussed, sustainability is not a fixed term, but a continuously evolving concept. The NCHS realizes this as well and writes that continuous learning and evaluation is a key part of the strategy. The plan is split up into two phases. The first one is setting the system up for success and clarifying the guidelines, then if this proves effective, phase 2 and a scale-up begins. These projects do not come for free and it is estimated to cost US\$ 3.9 per Malawian per year. As much as US\$ 407 million has been donated from partners and it is estimated to produce an economic return of 5:1; so, it is a financially sustainable solution that needs to happen.

The NCHS talks about hygiene specifically in terms of generally needing improvement and in terms of hygiene promotion. Specifically, it points to the department of Environmental Health under the MoH as being responsible for the area and their need to lead behavioral change. It specifically points to the MoH being accountable even though there are other donors behind the project. This is necessary due to the miscommunication issues that have come up in the past. For there to be a hope of behavioral change, the actors need to have a united front going into WASH policies. An academic said in one of my interviews that behavioral change is possible, but change takes time.

The Malawi Vision 2063

The Malawi Vision 2063 was published in 2021 and set even greater goals than The Vision 2020 had. The Malawi Vision 2063 has the subtitle "An Inclusively Wealth and Self-reliant Nation." Its own evaluation of lessons learned from the Vision 2020, claims that lack of economic growth is the reason for the lack in achievements. It has set even higher goals than The Vision 2020 did, even though the 2020 one was considered a failure, as pointed out by several of my interviewees. As regards to the new one, a political scientist stated: "with or without the pandemic I am still pessimistic whether Malawi was going to achieve what was stated in the documents." The Vision 2063 is

called a dream that will not be achieved. Still, there can be benefits to setting high goals and working towards the highest possible outcome.

As far as WASH policies go, *The Vision* has one segment on it. It says that the government will "lead and rally partners and communities in promoting the adoption of safe water and sanitation practices at the individual and household level." (NPC 2020, 39). It wants clean water, sanitation facilities, and good hygiene practices both in private and public places. This is not exactly a policy, but more a promise for the future. This is what the Malawi Visions are more about, a promise for the future rather than a specific policy. The specific policies will come in addition; however, there is no new WASH policy to guide Malawi.

The Vision 2063 points to not reaching the goals in The Vision 2020; however, as it contributes the failure to stagnant economic growth, it still sets value to these same goals. When it comes to framework, it specifically talks about the participation of marginalized groups in decision-making and community engagement in several of the sectors. The focus on environmental sustainability is much more prevalent here, than in The Vision 2020. It also largely focuses on sustainable economic growth but highlights that it needs to be an environmentally sustainable economy as well. Religion is less visible in this vision; although, it is still mentioned. It talks about how religious values are still important to Malawi, but also the necessity of having inclusive policies for other groups as well. Religious leaders are mentioned as crucial to engage the population in development, but changing norms is brought up in other settings as well.

4.1.4 Discussion

Firstly, the ministry structure around WASH is quite confusing and continuously changing. Through the last few years, the sanitation and hygiene responsibility has been moved from the MIWD to the MoH. Water access, sanitation, and hygiene are so highly linked that splitting the responsibility between two ministries causes the ministries to continuously have to work together and lessens accountability. Responsibility has in general been a problem for Malawi, where no one is truly held accountable for the

development because there are so many different actors involved (SDNP 2003). This issue is addressed in the *National Sanitation Policy 2006*, The HSSP II, and *The Malawi Vision 2063*, all three which claim the government or more specifically the MoH as the leading actor with the responsibility and accountability. That will be an important step towards better development in the future and decrease miscommunication and discoordination, which has also been identified as problems.

In their 2018 Annual Progress Report on the SDGs, the government also points to the fact that the WASH sector is continually understaffed; at that time, it was as bad as 60% vacancy in the sector (MFEPD 2018). This compromises the government's ability to ensure that WASH services are adequately maintained and it causes many donors to see barriers with working effectively through district governments, so they donate to NGOs instead (ibid). This is related to budget problems with the WASH sector, it simply lacks political priority and is underfunded to begin with (ibid). When Malawi ratified the SDGs, they committed to present annual budget frameworks for priorities and progress on the goals (UNDP 2018). However, a tendency has been that the budgeting framework is presented, but when it is voted on in the parliamentarian budget approval sessions, it falls through (ibid). Malawi has also historically been working in a deficit budget covered by the government borrowing money (ibid). The UNDP (2018, 7) worries that "continued government borrowing is likely to crowd out SDGs focus with additional resources more likely to be channeled towards debt service repayment."

The Malawi Vision 2020 and 2063 are good as overarching goals and policies, as creating specific policies will be more guided when created in line with *The Visions*. When it comes to *The Visions*, their influences are quite interesting. In the 2020 Vision, sustainability was first not a part of the pitch. This was added later by outside influences. This is interesting as reaching the MDGs and SDGs are such a central part of *The Visions*. Participation theory and community engagement is a continuous, strong thread through all of the government documents. It is the framework and repeated as the key to the solution. However, these documents span over 20 years and still the decentralization that is talked about is not showing in practice. The newest health policies are even more focused on this, as the government made the first National

Healthy Community Strategy in 2017, so hopefully there will be a broader focus on the local solutions in the near future.

WASH does not get mentioned a lot in the health or development policies, and since the last sanitation policy from 2006 ended in 2020, there has not been a new one created. Hopefully, as the new Vision was published there will be one soon, especially considering the impact Covid-19 has had on the country. The MoH does have several new Covid-19 related policies that will aid in the future development of sanitation and hygiene policies, with a special focus on HWWS and how important that is to prevent communicable diseases. In addition, the newer framework in Malawi does echo these important water governance principles; however, there is still a way to go before this is actually seen in the implementation.

4.2 NGOs in Malawi and their WASH Policies

The growth of governance beyond the nation-state has been seen as one of the most prominent developments in politics over the last 50 years (Storeng and Puyvallée 2018). This includes member state organizations and civil society organizations. Firstly, it is important to define civil society: "all those stakeholders who are neither government bodies nor private sector enterprises: groups such as non-governmental organisations, advocacy groups, faith-based organisations, networks of people living with the diseases, and so on" (Global Fund 2017). There are of course some discrepancies in different definitions; for example, some include academia while others do not. The terms NGO, civil society, and civil society partners are often used interchangeably (Storeng and Puyvallée 2018).

Numerous NGOs are working in Malawi in several sectors. As much as 40% of their national budget is aid money (Banik and Chinsinga 2016), and the country would not survive without it. One of the goals of *The Malawi Vision 2063* is to become more independent, but as of now, this is not the case, and the WASH sector is no exception. There are too many civil society organizations to write about them all; however, I have identified six actors through an analysis of newspaper articles as the most prominent

ones: Water for People, WaterAid Malawi, Inter Aide, World Vision Malawi, United Purpose Malawi, and the Global Handwashing Partnership (GHP).

4.2.1 Impact

An informant explained to me that in Malawi there has long been regulations and traditions for NGOs working in rural areas to give the local district the power over which projects get implemented. He went on to say that the District Executive Committee evaluates program suggestions by NGOs and decide whether it is needed or whether a too similar project is already being implemented. If so, they will suggest for the project to be moved elsewhere or for the methodology from the NGO to change (ibid). Some NGOs still bypass this and implement without approval because they find it more efficient or disagree with the government's development plan (ibid). Despite these projects, the MoH, and the MIWD working with handwashing access, Malawi still only has an access rate of 10%.

Water for People is an organization that has been working with WASH development in nine countries for more than 25 years. It has been working in three districts in Malawi since 2000, one of these districts being Blantyre. The WASH coordinator of the Blantyre district claims that Water for People has managed to bring the handwashing access in households in the district from 64% in 2018 to 92% in 2019 (Mandala 2019). Soap access has gone from 14% to 32% in the same time period, and 77% of households showed knowledge on when it was necessary to wash their hands (ibid). This will continue to be a focus area for the district and for Water for People. In 2019, it expanded to the Chiradzulu District as well. Its mission is to have long-term system change for WASH to achieve SDG 6 (Mandala 2019). Water for People has many collaboration partners, and one of those is also highly active in Malawi, namely: WaterAid (ibid). WaterAid Malawi also uses the UN Sustainable Development Framework to develop clean water sources and improved hygiene in Malawi (Wateraid n.d.). It has been active since 1999 in nine districts and three cities in Malawi. Water for People also works to accelerate social change by promoting sustainable behavior, being transparent about their data, and working as an advisory for the national government (Water for People 2017). Its exit criteria are when there is local capacity to sustainably

manage and replace services without the involvement of NGOs (ibid). Finally, Water for People evaluates that their work has directly impacted 1.5 million people in Malawi (ibid).

Inter Aide is an organization that was created in 1980 with a focus on rural development in WASH, education, and health (Inter Aide 2021). In Malawi, it has projects in 11 districts in the central and southern region of the country for WASH development with precise management and monitoring plans (ibid). Meanwhile, United Purpose, formerly known as Concern Universal, has for 40 years been fighting poverty and inequality. It sees WASH as a crucial part of that (United Purpose 2017). It has been active in Malawi since 1988 and has since the publication of the SDGs focused on bringing them to life. It does this through community-led projects in 15 districts in central and southern Malawi (ibid). It has over 360 hands-on workers in Malawi and is one of the largest NGOs in Malawi (ibid). In its 2017-2020 Strategy Report, United Purpose says that it is the biggest in Malawi on WASH with increasing access to nearly half a million people, which is 1 million less than Water for People states. United Purpose also claims to have increased the quality and coverage of basic services in rural Malawi, enhanced community resilience to climate change, and stimulated the local economy (Concern Universal 2016). The organization has 34 projects and 16 offices around the country focusing on rural areas and their four pillars: livelihood and food security, WASH, sustainable energy, and gender equality (United Purpose 2017).

The GHP is unsurprisingly a major actor in handwashing also in Malawi. However, it focuses more on the research, policy, and implementation guides to their partners who run projects in different areas (GHP n.d.). Its partners include UNICEF, World Vision, United Purpose, Wateraid as well as several others. Finally, World Vision Malawi is a Christian organization that has partnered with UNICEF and DFID for clean water projects in Malawi (World Vision Malawi 2021). It works with the technical aspect of giving people access to WASH by actually drilling the boreholes and it works with behavioral change (ibid).

4.2.2 Participation

Participation or community engagement or bottom-up projects, it has a lot of names and definitions that are not always the same; but the idea remains: "a process by which people, especially disadvantaged people, influence decisions that affect them." (The World Bank 1992, 177). Participation or similar terms are highly used in the rhetoric of the government policies in Malawi¹⁵ and in the civil society organization's strategies. All the six organizations talked about here have some sort of participation approach in their strategies.

Water for People writes in their 2017-2021 Strategy Plan that they use four lenses as their framework in the areas they work: community, government, market, and technical. The community lens is about civic empowerment and people wanting the change. It works with the government through local authorities and by co-financing, co-staffing and co-planning their goals for WASH in the district (ibid). WaterAid writes in its Malawi Country Programme Strategy 2016-2021 that it aims to be an influential leader in innovating, developing, testing, and advocating for effective services, systems, approaches, and technologies that bring about sustainable access to WASH services for all. It has four main strategic objectives:

- 1. Empowered citizens take responsibility and actively engage in the realization of their rights to WASH.
- 2. Sustainable, equitable, and inclusive WASH services are delivered at scale.
- The WASH sector is well coordinated, responsive, accountable, and creates an
 enabling environment for integrated delivery of equitable and sustainable
 WASH services.
- Sanitation and hygiene are recognized and prioritized across sectors as a public health concern and there is increased adoption of behavioral change at scale (WaterAid 2016, 10).

United Purpose (2017) writes that as their theory, they use what they call the three 'I's': intelligent development, disruptive innovation, and enabling independence. Two of

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¹⁵ As seen in the first section of this chapter

those have to do with participation. It explains intelligent development as being about how everything in development is interrelated, so having approaches that covers diverse community needs are most effective. These approaches include multi-layer approach, holistic approach, participatory approach, and consultative approach. In addition to all these approaches, it highlights its values for transparency, making sure marginalized people are heard, higher learning, and utilizing research in the approaches. In addition, enabling independence ensures that the power remains with the communities that can advocate for their rights and improve their own lives. For this, United Purpose wants to use a market-based business approach while also making sure that marginalized people are not meeting barriers that keep them from participating in the market.

Some organizations are not as detailed about their position but still mention it on their websites. Inter Aide writes that one of its objectives is to strengthen the capacity of local actors to maintain their health infrastructures (Inter Aide 2021). World Vision uses CLTS and School-Led Total Sanitation (SLTS) in their projects (World Vision Malawi 2021). The Global Handwashing Partnership calls themselves a community-based organization and has several events that include local schools and so on, but do not go into it as their policy further than that.

4.2.3 Advocacy and behavioral change

Advocacy through donations usually includes an attempt to redefine political priorities (Storeng et al. 2018). By political priority, it is meant: "the degree to which international and national political leaders actively give attention to an issue and back up that attention with the provision of financial, technical and human resources that are commensurate with the severity of the issues." (Daire, Kloster and Storeng 2018, 226). Through changing the political priority, the hope is to increase development and launch behavioral change.

Water for People works with markets to mobilize demand, and the technical aspect is about innovation and skill training through supporting small businesses' ideas and plans to grow. It explains it by saying: "Change comes from communities seeking a better

future; governments willing to support the change; and market forces and technical solutions that are deployed to help enable and achieve the change." (Water for People 2017, 7). When it comes to hygiene behavioral change, WaterAid states that "Unless the benefits of good hygiene are fully understood and ingrained as a social norm, toilets may not be used, water and food will continue to be polluted and dignity will be compromised." (WaterAid n.d., para. 3). It claims that water and sanitation infrastructure is important as it alleviates the physical barrier of the problem, but without addressing the social aspects, it will not help (ibid). Simply educating on the importance of hygiene has proven not to be sufficient, so WaterAid is working on hygiene promotion approaches that are shown to be more effective in increasing sustainable behavior and knowledge using community participation, social marketing, motivational emotional factors, and change in behavior settings (ibid). Its targeted hygiene behaviors include HWWS at critical times, safe water management, fecal management and disposal, menstrual hygiene management, and food hygiene (ibid).

United Purpose has, as previously mentioned, their three 'I's': intelligent development, disruptive innovation, and enabling independence. The first and third has to do with participation and community engagement and has already been discussed; however, the second, disruptive innovation has to do with behavioral change. United Purpose works with universities to develop truly disruptive innovations that change the market system and the norms (United Purpose 2017). World Vision also focuses on hygiene behavioral change promotion through trained faith leaders who participate in the programming and took leader roles in engaging community members and students in the biblical understanding of WASH (World Vision International 2020). It had 179 faith leaders involved in 2019 (ibid).

4.2.4 Discussion

Many NGOs are working in Malawi; these are just a selected few. At one school, it took the head teacher an hour and a half to describe all the development projects that 14 different companies had in their school (Pot 2019). Nevertheless, he did say that the school would not be possible without them (ibid). It is hard to measure the impact an organization has; however, they certainly try themselves. United Purpose says it has

'reached' 1.2 million people in Malawi as of now (United Purpose 2017). Furthermore, it says that it has 'increased access' to nearly half a million people (ibid). It does not specify what the difference is or define either, so it is hard to say what these numbers actually mean and where they are coming from. Moreover, it also claims to be the largest in Malawi on WASH (United Purpose 2017); however, Water for People claims to have 'reached' 1.5 million people in Malawi (Water for People 2017), again without any definition. These statements do not match. So, in addition to the evaluation of access statistics differentiating from organization to organization and between the government and UN numbers, the 'people reached' or 'people helped' or 'impact numbers' cannot all be right either as they do not match and that for all the numbers to be true, all of Malawi would already be reached. So, either the impact is not sustainable, or it is not to the level claimed by the actors.

Partnerships between governments and NGOs are meant to be good for sharing knowledge, representing affected communities, ensuring local participation, sustainable solutions, and being responsive to the population's needs (Storeng and Puyvallée 2018). This is why civil society is often referred to as 'watch dogs' or as a critical voice. However, Storeng and Puyvallée found that over 18 partnerships, only 2.6% of the representing board members were speaking on behalf of the communities. This means there is a massive gap between rhetoric and reality. Numerous research projects on 'country-level operations' from global partnerships show that there are so complex power dynamics in the collaboration that they limit true participation (Spicer et al. 2011; Kapilashrami and O'Brien 2012; Harmer et al. 2013). INGOs sometimes claim to be locally led to receive support from local civil society and strengthen their financial and social power (Storeng et al. 2018). Participation has become an easily used word and there are many approaches that go into it. United Purpose alone mentions five different approaches in their short explanation of their theoretical approaches, and they are again different from the other organizations' approaches. It is easy to put participation into the rhetoric, but the implementation needs to be there too.

One of the goals with participation is to drive sustainable, long-term behavioral change. The problem with behavioral change policies is that they often require funding of district government, who, as mentioned earlier, often are not trusted by donors due to understaffing and inefficiencies. In addition, many donor countries fund INGOs headquartered in their own countries instead of direct funding in order to remain under the radar so they can protect their wider agendas and diplomatic ties (Storeng et al. 2018). The INGOs are often used as fronts by governments because they trust them to deliver results, navigate tensions, and because groups working against them come with harsh critiques that the governments do not want to be put on themselves (ibid). This has been compared to capitalistic outsourcing and critiqued as being neo-colonialist (ibid). However, due to scandals like 'Cashgate', the big corruption scandal where US\$ 20-100 million of public funds were stolen by politicians (Patel 2016), many donors no longer trust the central government either and would prefer to fund NGOs (Pot 2019). This puts a lot of pressure on NGOs to collaborate properly with the government and particularly local authorities, so that a top-down, outsider perspective, neo-colonial interventions are not happening. When it does happen, that goes against both the participation and the behavioral change principles that all the civil society organizations discussed in this chapter claim to be using in their implementation.

4.3 The United Nations WASH Policies and Approaches in Malawi

The UN (n.d.) writes on its website about its International Drinking Water Supply and Sanitation Decade from 1981-1990. While strides were made in access to drinking water during this decade, sanitation access and hygiene behavior lagged behind. It took the lessons from this and made the "WASH for all initiative" that emphasizes the teaching of sanitation and hygiene in schools and communities with a special focus on girls' education and gender equality. There are 34 government partners to this initiative and one of them is the Government of Malawi.

4.3.1 International agreements

Malawi is a part of several international agreements for WASH similar to the "WASH for all initiative." The Sanitation and Water for All (SWA) Partnership works with NGOs, governments, and the private sector for high-level action, improved

accountability, and effective use of scarce resources (SWA 2020). They hosted an online conference for SWA, including the Finance Ministers of African countries, as well as some other sector ministers, different Heads of UN agencies, and other organizations (ibid). This meeting was to discuss and agree on the financial plans for achieving universal WASH access (ibid). Malawi's statements at the meeting were "Develop financing mechanisms and strategy on leave no-one-behind" and "Identify sanitation technologies and financing approaches through its membership that will facilitate increased access to basic sanitation, in poorest and hardest to reach areas and marginalized groups of people by 2024." (ibid). The meeting was intended for creating a global partnership on a more efficient strategy for WASH, and Malawi has joined the effort. However, as usual Malawi focuses mainly on the financial aspects of the issue.

The African Union made in 2019 a *Water Vision 2025* for water and sanitation development in Africa. In that vision, it says: "An Africa where there is an equitable and sustainable use and management of water resources for poverty alleviation, socioeconomic development, regional cooperation, and the environment." (African Union n.d.). This vision is mostly focused on water access, some on sanitation; hygiene on the other hand, is only mentioned twice. Moreover, a more hygiene-related agreement Malawi became a part of in 2008 is the eThekwini Declaration. Here Malawi committed to, among other things: establish and review a national plan for sanitation and hygiene, establish one coordinating body in charge of sanitation and hygiene, and spend a minimum of 0.5% of their GDP on sanitation and hygiene (AfricaSan 2008). Malawi only spends 0.3% of their GDP on WASH and it still has two government ministries with responsibility over different section of WASH. Again, Malawi is showing will in the policy commitment, but lack in the actual implementation.

Global partnerships for common goals, strategies, and partnerships are part of what the UN stands for and have the ability to achieve. The creation of the MDGs and SDGs are based on this idea and Malawi has committed to working towards them both. Different reports say different things about how well Malawi did with the MDGs; however, both the UNDP and the Government of Malawi say they reached about half (UNDP 2015; Ministry of Development Planning and Cooperation 2010). The SDGs are more

numerous and have higher standards; however, the idea of these international goals is not to be exact measurements of success but rather to highlight important targets, give an overall guiding strategy, and create a global partnership around these goals. Malawi is committed to working with the UN towards them.

4.3.2 UN WASH policies

UNICEF heads most of the UN's WASH programs. UNICEF is a major player in WASH in the world and in Malawi. With hygiene, it works on behavioral change to achieve good HWWS practices all over the country, particularly in rural areas (Brown 2018). Being part of the UN, UNICEF has a large focus on the SDGs, their connections to each other, and their policy and principles (ibid). The main goals of the UN's WASH policies are to eliminate open defecation and provide universal access to basic drinking water, sanitation, and hygiene. UN also has an extensive focus on eliminating inequalities in access to services by population group (UN 2015). However, many challenges are involved in implementing WASH policies. The UN (2015) identifies in its strategy that financing is one of the major challenges. Governments need to increase the proportion of their budget that goes to WASH and donations need to respond to local needs rather than the organizations' targets. Drinking water continues to be the focus instead of sanitation and hygiene, and insufficient amounts are going to the operation and maintenance of the projects, making them unsustainable (ibid). Sustainability is key, meaning that investing in more expensive borehole drillings is cost-effective because they will last longer and bring better quality water (ibid). This, coupled with sufficient staffing, there is a real chance of having a sustainable water system.

For efficient financing, the UN uses a result-based financing approach, which needs multi-donor trust funds and behavioral change to work (UN 2015). The UN also points out the need to target marginalized groups, such as the lowest income groups, and when it comes to sanitation, women and people with disabilities are especially vulnerable (ibid). It also points to a human rights-based approach, which highlights the need for transparency, accountability, participation, non-discrimination, and a good flow of information (ibid). In this WASH strategy, the UN says: "Perhaps the biggest challenge

still pending is hygiene" (UN 2015, 6). It points to hygiene education and information as a being prominent part of the initiative and that teaching it in school can cause positive behavioral change that is brought home and stays for life (ibid). UNICEF leads sanitation and hygiene for the UN and uses Community Approach to Total Sanitation (CATS).

CATS is an umbrella term used by UNICEF to cover a wide range of community-based sanitation programs (UNICEF 2017). They are rooted in community demand and leadership, and they focus on behavior and social change, as well as local innovations (ibid). UNICEF works in over 50 countries in the world to mainstream CATS (ibid). In certain projects, UNICEF couple it with Social Norm Theory, which has improved effectiveness in some places; however, it has proven more efficient not to use Social Norm Theory in others. This is depending on the implementation location's step in the process, so the approaches used also need to be context-specific (ibid). UNICEF (2017) says that based on previous projects, they have experienced decentralization to local bodies to be more effective. In some countries, this is to the district level, others the municipality level, and others to chiefdoms. UNICEF (2017) also points to the importance of local monitoring as it increases ownership over the process and accountability towards delivering on plans and programs. More specifically, UNICEF uses CLTS in Malawi to increase demand for toilets and handwashing stations (Brown 2018). UNICEF has some projects in Malawi where it collaborates with the community to building solar powered water pumps as a sustainable way of getting clean water (ibid). However, there is still a need for increased staffing and training that can check up on these projects and keep them going (ibid).

The UN and the Government of Malawi (2019) came up with a development assistance framework where they identified five root causes of development challenges in Malawi: poor governance, climate change, weak economic structure, rapid population growth, and negative social norms. In this framework, they point to WASH being a problem; however, they do not present many solutions. Having said that, they do introduce a new aspect I have not seen in any framework before, which is the preparation for climate, financial, and political shocks by creating sustainable and climate resilient WASH

services for communities and institutions. They also point to the importance of communication and advocacy to change negative norms.

In another UN report about Malawi, it mentions problems with gender-based violence related to WASH and that community-based service delivery is its focus (UN 2018d). An NGO representative from an organization that works with gender-based violence explained in an interview that gender-based violence is a big part of why sanitation is important. Sanitation facilities keep girls in school longer, and many violent incidents happen in relation to girls not having a private space for their sanitation needs.

4.3.3 Discussion

The UN has criticized Malawi for not spending enough of its budget on WASH and for projects falling through during parliamentarian budgeting approval sessions (UNDP 2018). Malawi is only spending 0.3% of their GDP on WASH, which is less than the 0.5% it committed to in the eThekwini Declaration (ibid). However, the UN is not very clear in its framework for Malawi on SDG 6, making it hard for any overarching policy decisions to be made. When it comes to participation, it is hard to say how much is rhetoric and how much is actually implemented without observing myself. That being said, on a policy level, the UN is strong on the use of community-based approaches. In SDG 6, there is a specific target for participation, and the UN stands firmly with its human rights principles, which can have a very positive effect on other actors when making their strategies.

General critique of the SDGs include inconsistencies between the socio-economic development and the environmental sustainability goals (Swain 2017). Furthermore, it has been questioned where the financing is going to come from and whether it will be sufficient (ibid). Finally, SDG 6 receives less attention in the frameworks, strategies, and evaluation reports than the other SGDs. This is regardless of the evidence provided; proving the importance of SDG 6 has on reaching the overall goals. Within SDG 6, drinking water still receives the most funding. This makes sense to a certain degree, considering handwashing would not be possible without clean water. However, in

Malawi 67% have access to improved drinking water and 42% to basic sanitation, while only 10% have handwashing facilities in their households (MFEPD 2018). This makes it quite clear where the focus needs to be moving forward.

4.4 Conclusion

Without accountability, development is a struggle. The Government of Malawi needs to make it clear which ministry has the responsibility for WASH, so proper planning can occur, and an entity can be held accountable if the implementation does not happen the way it is supposed to. Also, there needs to be more funding in the upkeep of projects. Considering the amount of vacancy that has been reported in the sector, none of the projects can be sustainable because they are not taken care of long-term. Sustainability is equally important to the initial implementation, as it secures access for future generations as well as current ones. The government preaches in its development plans about how it is going to develop Malawi with a sustainable economy and community participation and improvement in all sectors of society, but it simply does not have the money or the political will to follow up its promises.

The civil society organizations report great numbers of reachability; however, they are self-reporting, and several of the numbers they present are contradictory. Still, it is disclosed from other sources that they are making a difference in Malawi. The government, NGOs, and the UN elaborate on their use of participation. It is imperative that this does not just remain a buzzword but that true representation is happening in the projects. Through participation, long-lasting behavioral change can happen, and sustainable norms can become part of the culture. Regardless, there is too little focus on handwashing in Malawi. Utilizing humanitarian crises as a window of opportunity can be big drivers for sanitation development (UNICEF 2017), so this pandemic might be the opportunity we need to embrace handwashing development fully.

5 The Pandemic Effect: Has Covid-19 Affected WASH Policy in Malawi?

As discussed in chapter 4, there were already numerous civil society organizations working with handwashing in Malawi due to the low access rates. In this chapter, I will examine how handwashing in all aspects of Malawian life has changed throughout 2020 during the Covid-19 pandemic. This has been done by examining newspaper articles on handwashing through that year, as well as remote interviews I have conducted in 2021. I will do this by first looking at the government structure, programs, and policies, as well as discuss major political events that have happened in the last year and are highly relevant to the governance of WASH. Then I discuss donations and the evolution of donor aid through 2020, including from NGOs, foreign governments, and religious organizations, as this is also an essential part of the WASH transition through the pandemic. Finally, I examine the UN agencies and the major role they played in handwashing development during Covid-19, before discussing the overall effect these actors had on handwashing in Malawi last year.

5.1 Governance

The general WASH situation in Malawi is vital to understanding how SDG 6 can be reached in Malawi. However, this global pandemic has really changed the way we talk about and do hand hygiene. In other words, Covid-19 has had a lot to say for handwashing development. Therefore, it is necessary to look at the Covid-19 response in Malawi in relation to if the policies used participation methods, the projects were sustainable, and the people were open to the implementation and changing their behavior. But first, I will discuss the context of the pandemic and its effect on the power the government had to enforce regulations, as this is necessary to understand before an analysis of their effectiveness can occur.

5.1.1 The Covid-19 situation in Malawi

One of the most important protections against the Covid-19 pandemic has been frequent handwashing. It is therefore only natural that handwashing has received increased attention since Covid-19 was declared a global pandemic in March 2020. This is the case for Malawi as well. In 2019, nine articles in *The Nation* mentioned 'handwashing' or 'wash hands', while in 2020, there were 83. This is just one way of showing how the Covid-19 pandemic has influenced the way we see handwashing and regard its importance.

The initial reactions

Malawi had its first confirmed case of Covid-19 on April 2, 2020, several months after the first case in China and the confirmed spreading of the virus through the world. In general, Africa had confirmed cases of the virus after the rest of the world, which the Malawian epidemiologist Dr. Titus Divala (2021), in an interview with the *Oslo SDG Initiative*, attributes to there being less international communication with Africa. In addition, he believes there is some biological component as to why the spread has been slower in Africa. Malawi has the Public Health Act and the Disaster Preparedness and Relief Act that allowed the President to declare a state of emergency before there were even any confirmed cases to introduce measures that could delay or prevent the start of spreading (The Nation Online 2020a). However, 'copy pasting' policy will not work as local, social, medical, and economic factors need to be considered (Divala 2021). The National Planning Committee of Malawi estimated that moderate movement and livelihood restrictions ¹⁶ could lose US\$ 6.7 million over the next 30 years (Chilundu 2020a). Malawi therefore needed to focus on other measures like wearing a mask, socially distancing, and handwashing (Divala 2021).

Malawi had very low numbers of infections through 2020; however, in the first month of 2021, the deaths doubled, and two ministers passed away due to Covid-19, so the country is again in a state of crisis (Divala 2021). Nevertheless, there are several positive developments in Malawi. Previous Ebola sites have been used as Covid-19

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¹⁶ lockdown

treatment centers for now, and the vaccination program in Malawi is prepared to the Covid-19 vaccine once it arrives (ibid). There have been cases of community engagement and bottom-up initiatives; although, the government has not officially encouraged it. They should reinforce it, and Dr. Divala believes that is the only way to combat the virus and for the practice to remain, which would be a very positive development for combatting other diseases as well. He says that even though the economy will take a hard hit, Malawi will survive Coivd-19 through collaborating with neighboring countries, practicing handwashing, and community engagement.

New elections

Malawi had to have an election in the middle of the pandemic since the one from 2019 was deemed illegitimate by the country's high judiciary. Credible elections are a necessity in all democracies and especially in this case, as the political turmoil around the election highly affected people's response to regulations. If the government does not have the support of its people, implementing policy and regulations becomes even harder regardless of it being in a time of crisis. In May 2019, Malawi held its quinquennial elections with a 74.44% turnout, and the ruling Democratic Progressive Party (DPP) won with 38.57% of the votes (Chirwa et al. 2021). The other parties challenged the elections. After a seven-month trial, in February 2020, the High Court nullified the presidential election due to massive irregularities and ordered a new one to be held within 150 days of the ruling (ibid). This means that as the Covid-19 pandemic hit, Malawi had a falsely elected government that they had to trust in imposing strict regulation to battle Covid-19. The people simply did not give that trust. People cared more about the political situation than the pandemic, so they were protesting, other parties were campaigning, and people were going against the regulations (Chirwa et al. 2021). Several of my informants said that many even felt the Covid-19 regulations were put in place to restrict political rights and have an excuse to postpone the elections. However, handwashing is one of the preventions that do not restrict political rights, and therefore this advice was not directly affected by this, but still the focus of the reelection took away focus on Covid-19 in the beginning.

Regardless, the government did restrict travel, social distancing, closed schools, and most importantly, implored handwashing even before there was a confirmed case in Malawi (Chirwa et al. 2021). Still, the first confirmed case came in April of 2020, and by the new election in June, there were 3302 cases and 76 deaths (Public Health Institute of Malawi 2020). Public health experts and the DPP asked for the election to be postponed due to the health risk of contracting and spreading Covid-19, but the election was held, and the Malawian Congress Party won. Chirwa et al. (2021) studied how the pandemic affected the election in Malawi, as previous studies have shown that health emergencies have an effect on political behavior, electoral outcomes, and governance in general. They found that 75% of Malawians were willing to vote regardless of the risk of Covid-19; however, a lower number, 64.8%, actually did vote, which is also less than in the original 2019 elections. Several of my interviewees stated that fear of Covid-19 did not cause the lower turnout, which they base on their experience with how people behaved at that time. They also claimed that it was right of Malawi to have the election when they did, as people were more focused on politics than on the pandemic. The new government had made many promises and had a unique opportunity to make some changes. However, a Malawian journalist pointed out in one of my interviews that we are already seeing similar tendencies of nepotism and corruption that previous governments have had, causing this President to lose the public confidence he had before the election.

5.1.2 Development policies and implementation

The Malawian government writes quality development plans that are logical, rational, and target major areas in need of development. Contrary, the implementation is a different story. According to a senior lecturer at the University of Malawi, the implementation is weak for several reasons including a general lack of funding, as well as mismanagement and corruption. He goes on to explain that centrally, the government is struggling with tensions between the ministries that deal with WASH, namely MIWD and MoH. Currently, there is a significant amount of money going to WASH. Both ministries want this funding and are therefore arguing for themselves being responsible for the WASH sector. Before Covid-19, it was divided to where water access was a part of the MIWD, while sanitation and hygiene fell under MoH, and already then, there were 2016). problems with jurisdiction (Inter Aide This is a continuing problem in the

pandemic and in the Government *Covid-19 Response Plan* it says that the MIWD will lead the WASH section of the response along with UNICEF (Itai 2020), while on UNICEF's website it says it is leading it along with the MoH (UNICEF Malawi 2020a). Miscommunication between the actors is a serious problem that continues to cause restraints on the planning and progress centrally. Locally, on the other hand, the District Executive Committee works with the civil society and foreign state funding to implement projects.

As previously mentioned, the government policies are justifiable; they just struggle with the implementation. According to a political scientist at the University of Malawi, this is due to lack of funding, corruption, and poor money management. The district offices are expected to make development implementation in their areas; however, they cannot due to lack of resources. The pandemic has not helped this aspect. The economy has taken a hard hit from the pandemic, and more donations and NGO involvement has been necessary. Coming back from this will make development even harder than it was before the pandemic. The World Bank estimates that in Sub-Saharan Africa, Covid-19 will cost between US\$ 37 billion and US\$ 79 billion (The Nation Online 2020k). Although Malawi might be affected less than countries like South Africa, Tanzania, and Kenya that rely so much on their tourism, Malawi's tourism industry has also been affected, as well as the other financial disruptions coming from the pandemic.

5.1.3 Preparedness

In March of 2020, the then ruling government presented a Covid-19 response plan to try to prevent the disease from ever entering the population (MoH 2020). The government used many means of communication, including ministers being on famous radio and TV shows to spread the message of the importance of Covid-19 (Itai 2020). Its preparedness objectives were: to provide safe water supply in adequate quantities to affected populations and surrounding communities, to provide gender-responsive sanitation and hygiene facilities in emergency treatment units, promote HWWS, ensure coordination of WASH response to the corona outbreak, effective information sharing about WASH response, and preposition adequate health and WASH supplies to respond to perceived outbreaks. There has been reported that the initial government response was chaotic

(Kainja 2020b). Several other ministries have tried to chip in, sending conflicting messages, which has led to city councils adopting vastly different strategies to prevent the disease (ibid). Although locally adapted policies are good and more effective, there needs be an overall coherence in the strategy.

The neighboring countries of Malawi had cases of Covid-19 before Malawi did. For this reason, Malawi took many preventative measures to try to stop the disease from ever spreading. As the then First Lady Gertrude Mutharika said: "Let's continue to be vigilant in observing hygiene because prevention is better than cure." (The Nation Online 2020b, para. 3). Poverty in rural areas remains a problem for hygiene preventative measures. Locals explain that even when they do have soap, the water shortage is so bad that they still cannot wash their hands (The Nation Online 2020c). Reaching the rural areas has been an ongoing critique in the Covid-19 response. In the cities, there has been clearly shown an increased access to handwashing in public and citizens abide by the regulations (The Nation Online 2020e); however, in rural areas, the story is different. There is a lack of access, and even when there is limited access; drinking water is prioritized over HWWS (Kainja 2020a). As a final prevention measure, schools closed down, and healthcare facilities started preparing, asking for personal protective equipment (PPE), and limiting visitation hours (The Nation Online 2020g).

The disease did finally enter the country in April, and all of the first cases could be traced to import from other countries, and as much as half were from Tanzania (Mwale 2020a). The Lilongwe District Health Office was struggling to trace contact spreading as people enter in and out of the city, and the capital is a hotspot for the disease, so it was spreading fast (Chilundu 2020b). Blantyre, the second-largest city in Malawi, also took strong measures to prevent the spread. The city council ordered handwashing facilities at worshipping houses, shops and offices, as well as at organized public gatherings such as weddings and funerals (Mkwanda 2020). The city council provided chlorine buckets at 34 markets around the city and said it will use law enforcement measures on non-compliant residents (ibid). Similarly, the Lilongwe City Council demanded handwashing facilities at public places and worked with market committees

to enforce the hygiene practice (The Nation Online 2020d). These policies are a positive trend we are seeing with normalizing handwashing in public in Malawi. This is particularly important at public facilities such as schools and healthcare units.

5.1.4 Public facilities: schools and healthcare

When schools first shut down in March of 2020, they were homeschooling through radio programs, where the children washed their hands, sat apart, and listened to the program together (Chavula 2020a). In September, they reopened although they faced some backlash from teachers claiming that the government had not provided enough PPE for the teachers (Mwale 2020a). Before the pandemic, basic handwashing access at schools was at 21% (JMP 2019), and there was still a short supply in facemasks for teachers at the reopening stage (Mwale 2020a). However, the government provided buckets and soap for students to wash their hands (ibid), and several of my informants support the fact that schools have been a main priority for handwashing development in Malawi. In addition, motorcycle taxis, which is a common transport for students, were urged to use sanitizers and have handwashing facilities at their pick-up spots (Malawi News Agency 2020a). Although there is claims of unequal distribution of PPE among different schools and a general lack of funding from the government (Mwale 2020a). In other words, many NGOs have been contributing with donating PPE (Buliyani 2020a; Kandodo 2020; Mwale 2020a, 2020b). The reports from schools is that the regulations are being followed with distance, mask-wearing, and handwashing (Milakwa 2020b).

Schools are not the only facilities in need of PPE; healthcare is also struggling with shortages. Before the pandemic, only 27% of healthcare facilities had basic access to handwashing stations (JMP 2019). Healthcare facilities reported hostility from communities in the beginning of the pandemic. They had not received enough information about the pandemic and were skeptical of the measures being put in place (The Nation Online 2020f). In other places, there is hard to have any measures at all when the water scarcity is so bad, the hospitals do not have drinking water for their patients, let alone to wash their hands in (Chirwa 2020b). NGOs call on the government to make long-term plans and provide more water points in rural healthcare facilities (ibid). NGOs have donated to the healthcare facilities as well as schools, which the

District Health Offices appreciated and appealed for more to do (Malawi News Agency 2020b; Chavula 2020b; Buliyani 2020b). They are not the only ones, several religious groups have also contributed to the financing of PPE in healthcare facilities, and so have other nation-states (Malawi News Agency 2020c; 2020e). One facility has been running for 10 years without water; however, due to Covid-19 a project funded by the Constituency Development Fund will reinstall water pipes in the health center (Malawi News Agency 2020d). Several universities in Malawi turned around to be able to help the healthcare situation by making test stations in their laboratories and developing hand sanitizers (Mchulu 2020). Many institutions started working on vaccines. The engagement in innovation and technology development can play a huge part in containing the situation and working towards better health for Malawians in the future (ibid).

5.1.5 Community engagement

Being in close proximity and touching is a very important part of Malawian culture, especially handshaking. One journalist I spoke with said "we call ourselves the warm hearth of Africa" and that warmth is showed through physical touch and in particular handshakes. However, a Malawian epidemiologist said in one of the interviews that it is likely that after over a year of not shaking hands, the change might be permanent, in addition to hand hygiene behavior becoming part of the culture. This statement is backed by behavioral change studies that say that it usually takes less than half that time to change habits (Webb, Sheeran, and Luszczynska 2010). Still, in the beginning this caused a problem for trying to enforce strict social distancing rules. The government is trying to push for wearing masks, washing hands, and keeping distance; however, they have not encouraged local leaders and chiefs to spread the message (Divala 2021). This is still happening, but the government encouraging it would be an essential step towards promoting safe practices as local leaders are highly respected by the population (ibid). Things like soap and facemasks are also expensive and measures need to be taken to ensure the availability of these protections. Dr. Divala (2021) points to a bottom-up approach being less expensive and ensuring long-term effects of the preventions taken now. Many diseases are preventable through the same measures as are being taken against Coivd-19, so ensuring these practices stay even after the pandemic is crucial, and community engagement is the way to guarantee that.

The government did have as a part of its Covid-19 response plan, that WASH services should be implemented through working at the village level with district leaders and health teams (MoH 2020). As previously mentioned, rural areas have a higher struggle to fight coronavirus because the high poverty makes people unable to afford face masks and soap (Mwale 2020c). Policies about the community structure are manifold; contrary, the implementation struggle. A public health specialist I spoke to pointed out that in Malawi, the trust of the people lays in their local, traditional, and religious leaders more than their central government or even the regional or district leaders. Therefore, it is the responsibility of NGOs and particularly the elected government representatives, to empower these leaders to be the voices for their communities, make the development plans, and get the messaging out to their communities. He went on to say that in other health crises, this has proven to be an effective way of getting the messaging out, for example in the Ebola epidemic in West Africa in 2014. He highlighted this point by saying: "the impact ... was primarily driven by bottom-up approaches where the community came together, so the advice I have is really to consider changing the structure ... in such a way that the communities have their own small committees that are managing the disease." Currently, this principle is present in policies from NGOs and governments; however, when most of the implementation does not match the policies, they become somewhat irrelevant.

Still, there are some examples of local leaders promoting regulations during the Covid-19 pandemic. Chiefs are promoting preventative measures in their communities; however, the reinforcement is challenging due to lack of protective gear (Mwale 2020c). Senior chiefs have been saying they need help from institutions, businesses, or organizations to access these life-saving measures. When it comes to distancing, traditional leaders have been reported taking measures only allowing so many people to gather at a time, even at funerals (The Nation Online 2020c). Local religious leaders have been seen to take measures in places for worship, as well as spread messages to their followers about health advice and safety (The Nation Online 2020h).

5.1.6 Discussion

The government quickly published a policy plan for Covid-19 preparedness even before the pandemic reached the country. This was despite being a mistrusted government that would possibly be removed just a couple of months later, which it was. Still, it enforced strict restrictions, some that they struggled to reinforce, some that were easier. It closed schools, demanded business, marketplaces, and other public areas to have access to handwashing on entry and had policing reinforcing that it happened. The government made these policies in collaboration with NGOs and UNICEF. The civil society, inspired by the government policies, made their own that also focused on WASH and WASH behavior. However, there is some clear confusion in the policies as well. To start with, the preparedness plan from March 2020 stated that the MIWD were in charge of WASH related policies and development, while UNICEF and NGOs who were a part of making this plan says it is the MoH. This is highlighted in news articles that describe the initial government response as chaotic, without leadership, and with varying messages from different ministries causing discrepancies in local policies. There was also reporting of the ministry not wanting to involve traditional leaders and not calling on their help, even though their preparedness plan said that was going to be part of their strategy.

This was at the beginning of the pandemic; however, there is a clear shift in language throughout the summer of 2020. The reporting at the beginning of the pandemic was a bleak one that articulated the view that Malawi was not prepared, and it was calling for help from other actors. It talks about lack of access in rural areas, lack of control in urban areas, and even lack of preparedness in the healthcare sector. Then, through the summer, the reporting became about the new initiatives, the local, traditional, and religious leaders supporting the government policies. The articles praised government, NGOs, and foreign aid initiatives in the country for creating more access, more funding, and more preparedness. Hospitals without water access for ten years now got it fixed, and sanitation and hygiene became a focus. When schools reopened in September, there was a lot of skepticism about how it would go, but the government got chlorine buckets for students and demanded handwashing at pick-up spots for students. Through that fall that schools reopened; cases stayed low. Their policies worked.

The government took use of what they had and used previous Ebola treatment centers for the Covid-19 response. They collaborated with other actors and eventually have a unified response led by them with help from the other actors such as NGOs, the private sector, and the UN. However, this has not been free. Sub-Saharan Africa is in their first recession in 25 years with a growth of between -2.1% and -5.1% and the pandemic will cost the region about US\$ 37-79 million (The Nation Online 2020k). In addition, Malawi has had considerable support from NGOs and the UN, which goes against its goal of financial independence. That being said, in this crisis it was absolutely necessary. The chaos of investors and actors from the beginning of the pandemic was organized, and the collective response much more unified. One informant ended the interview with saying: "I'm certain that we are going to come out of this wounded, but also stronger." Malawi faced a second wave in the beginning of 2021, which can also be described as a new pandemic because of the much more contagious South Africa version of the coronavirus spreading through the country. Even though cases are going up, WASH access has not gone down. It is simply the more contagious version of the virus spreading and after a long period of low cases through the fall, a more relaxed population. The vaccine is what will now get Malawi out of this pandemic and Malawi has a good vaccination system and is prepared to start vaccinating when the vaccines came, which started in April of 2021 a year after their first case.

5.2 Outside Donations: NGOs, Foreign Aid, and Religious Organizations

Many donations are happening in the WASH sector in Malawi, both from active actors and from others. When Covid-19 was declared an emergency of international concern, several new donors started giving to this sector in Malawi. This includes civil society organizations, religious groups, and governments, who were all already involved; but also, new NGOs, the private sector, several government ministries have gotten involved, and even personal 'Go Fund Mes', a site created to help people raise money for various goals, have been started in different countries to support the Malawian WASH sector.

5.2.1 Civil society

NGOs were already before the pandemic the main providers of WASH in Malawi. The government has been struggling to keep up with the demand of water, soap, and face masks for several areas in the country, so both local and central government have been asking civil society for help. A Mangochi District Hospital medical officer said in April: "You vowed to help people during bad or good times. Let not the virus scare you." (The Nation Online 2020j, para. 6). New organizations to the WASH sector have been seen donating PPE such as There is Hope, The National Initiative for Civic Education, CARE Malawi, Oxfam, and Plan International (Buliyani 2020b; Kandodo 2020; Malawi News Agency 2020b; Chavula 2020b; The Nation Online 2020i). The already established actors in WASH has also continued the donation and made new specific Covid-19 plans. UNICEF was even tasked with handling the government response, which a diplomat said they did exemplary. However, in the beginning, many NGOs just wanted the media attention to raise funds. A journalist told me: "So what we are seeing with Covid is what happens when there are disasters in Malawi. NGOs will come just on impact and usually they want to be seen giving something, like just the response, not the retraction or the rest. So with the pandemic we've seen a lot of NGOs coming scrambling for reporters taking them to the sights just to distribute some buckets, some facemasks and just those tiny things, but in terms of civil education very few organizations are doing that seriously and selflessly."

Several known NGOs in the WASH sector in Malawi write about their Covid-19 response in their websites. For example, WaterAid is working with the MoH, the Lilongwe City Assembly, and the District Health Offices in several districts across the country (WaterAid n.d.b). It has provided equipment and supplies to support good hygiene practices, especially handwashing in public places and hospitals, as well as intensified messaging about good hygiene through posters, radio, and local media (ibid). Finally, it has aided the national response plan and helped train medical staff on infection prevention through WASH (ibid). Many newspaper articles have been written about World Vision Malawi's strong presence in the country during the pandemic. It also has a Covid-19 response webpage that explains how it went to the Lilongwe District to speak to children, church leaders, and community members about what they wanted to have in terms of preventative measures for the pandemic while still obtaining

some sort of normalcy (World Vision Malawi 2021). World Vision has also helped equip parents in for homeschooling while the schools were closed from March to September in 2020 (ibid). United Purpose has been getting funding from UNICEF and ECHO to be a part of the WASH response during the pandemic (United Purpose 2021). It has also joined other NGOs in a common effort to strengthen health systems with WASH. They have been working on ways to get messaging across to the illiterate, and the visually impaired, as well as get menstrual hygiene kits for girls and women (ibid).

As the authorities have been asking for help, many known NGOs in the WASH sector in the country have been working with the government. Water Mission Malawi has been collaborating with the government to fix water points for rural healthcare facilities (Chirwa 2020b), to educate on hygiene behavior, and with Lilongwe City Council for better control over their spread (Chilundu 2020b). The Red Cross and World Vision Malawi was early with large PPE donations of the health districts (Malawi News Agency 2020g) and having hygiene promotion campaigns (Malawi News Agency 2020f; Buliyani 2020b). Oxfam is another organization that has been on the ball. It donated financially in addition to PPE to agricultural workers to ensure that the production did not take too hard a hit from the pandemic (Chavula 2020c). The increased focus on sanitation during the Covid-19 pandemic has been good for other reasons as well. It is a known fact that lack of access to toilets and handwashing makes girl's miss school when menstruating if they do not quit altogether (Moore 2017). The Center of Community Organization and Development has handed 54 toilets over to primary schools in Mulanje, which will provide toilets for over 7000 students and get girls in the area back in school full time (Malikwa 2020a). Similarly, Oxfam has taken the opportunity while developing handwashing facilities for people to also menstrual hygiene and gender-based violence (Pasungwi 2020).

The pandemic has affected gender-based violence. An NGO representative working with gender-based violence reported that there has been an increase in teen pregnancies and child marriages through the pandemic, and ties that to schools being closed and girls being at home more. A Malawian informant said that women are mostly responsible for getting water and some have to walk several miles every day to get it. In

the pandemic, there has been greater water demand making this job harder in addition to it causing exposure for the women and girls that have to go outside and get it. Several interviewees said that as schools reopened, there was less students returning than attended before they closed down. Particularly, there was less girls and that this fall away is linked to Sexual and Reproductive Health and Rights (SRHR). In other words, the pandemic, sanitation, and hygiene affect women and men differently and this needs to be part of the consideration in the development.

5.2.2 Religious aid

In a crisis like a global pandemic, mental tear on the population come in addition to the physical disease. Religions are known despite their limitations to give people positive emotions, and the majority of internal medicine specialists have positive attitudes towards religion's effect on health (Fardin 2020). Religions have a positive impact on human health by providing social support, self-efficacy, and cohesion. It keeps people calm and gives them a reason to continue even in the face of tragedy (ibid). The need for a meaningful system is essential in everyday life, but particularly when facing extraordinary stressors such as a pandemic (Park, Edmondsen, and Hale-Smith 2013). There is also evidence of religion being used for reducing uncertainty, increasing community feeling, and behavioral change (ibid).

Christianity is the largest religion in Malawi with 77.3% of the population being Christian (US Department of State 2019). In their *Covid-19 Preparedness Plan*, the Government of Malawi writes about using religious leaders as a part of their awareness campaigns (MoH 2020). Politicians often use quotes from the Bible and Christian morals to highlight their messages (Karim 2020). Many churches and Christian organizations have been active in donating, such as the Church of Central Africa Presbyterian and the Catholic Development Commission (Jali 2020; Malawi News Agency 2020c). Bishops were early to warn against the dangers of Covid-19 and ask members of the church to follow the government's advice (The Nation Online 2020h). The government has mandated that there be handwashing facilities in all places of worship and several church organizations worked with villages to empower rural communities in the fight against the pandemic (Chirwa 2020a). As religion is such an

important personal aspect in a time of crisis, there have been measures to try to keep houses of worship open even during the pandemic. During Christmas of 2020, the thoughts around Covid-19 were quite relaxed, and most churches gathered without any restriction (Chirambo 2020).

Many of the major NGOs, both religious and non-religious, work with the religious civil society in Malawi. A senior professor at the University of Malawi gave the Evangelic Association, the Catholic Association, and the Muslim Association as examples. Many of my informants believe that working faith-based has a value in and of itself, but especially in a country like Malawi where religion stands so strong. A faith-based NGO representative explained it as:

"in a country like Malawi, if you wish to make a difference, then it is completely dependent on working with the faith-based, regardless of if they are Muslims or Christians. That is because the religious leaders have much, much more trust from the population than political leaders."

He also claimed that it helps reach places otherwise unreachable: "because if there is nothing else, then it is at least a church or a mosque, to put it simply."

In the pandemic, the larger churches and mosques have followed the official guidelines and support them publicly, especially if they have public funding; however, privately they have spoken against the policies, and some even conspire that Covid-19 is not real. This is at least what a professor at the University of Malawi revealed to me. This double standard is dangerous considering how much influence these leaders have on the people, and this is why community engagement for development is so essential.

5.2.3 Foreign aid

Malawi is very reliant on foreign aid and during the pandemic, they were even more in need and got the help they asked for. Germany has donated a lot of medical equipment and PPE as well as money (Malawi News Agency 2020h). Both Germany and Norway have procured equipment and supplies through the Health Service Joint Fund (Malawi

News Agency 2020e). UK Aid has supported the government directly with PPE, testing capacity, medicines, sanitizers, and handwashing equipment (The Nation Online 2020f). UK Aid, previously known as the Department for International Development (DFID), has long been working in Malawi. UK Aid helped in October along with UNICEF to make a new Covid-19 plan for the rest of the pandemic (UNICEF Malawi 2020b). They have also donated financially, PPE, surveillance, treatment, communication, and coordination (ibid). Meanwhile, the United States has donated over US\$ 50,000 worth of handwashing stations to the Ministry of Education (Kaunde 2020).

After the 'Cashgate' corruption scandal in 2013, many donor governments no longer trust the Malawian government to handle the aid money, and together, Norway, Germany, and the United Kingdom created a fund for health-related aid money instead of donating directly, known as the Health Service Joint Fund (Haugen and Gondwe 2017). A Norwegian diplomat explained that outside consultants manage this fund and the three countries have some collaborating projects in the fund and some on their own. The idea is that the local government decides what happens with the fund money, but within projects that fit with the policy and goals of the donors. The projects get implemented by various actors, from NGOs to the private sector to UN agencies.

Malawi's reliance on others has been highlighted through the pandemic and is a trend many find concerning. A new focus on Malawi's local industries and vendors has increased. So has the want for Malawian manufacturers to make PPE, research centers to develop sanitizers, and to work with the African Union and neighboring countries to invest in homegrown or Africa-grown technologies for vaccines, medicine, and data collection (Karim 2020). There is nationalism and protectionism coming with the pandemic, even going as far as saying: "The pandemic is a war; protecting the country's borders is like protection during wartime." (ibid, para. 12). Malawi did have positive cases a lot later than their neighboring countries. Over half of the confirmed cases in May could be traced back to Tanzania, which is used as an argument for protectionism (Mwale 2020d). This is also part of *The Vision* Malawi mandate, namely to become more independent and less reliant on foreign aid and NGOs.

What has also been an interesting development in the funding of projects in Malawi is personally created 'Go Fund Mes. Since the pandemic broke out, there has been created millions of Go Fund Mes for Covid-19 support all over the world. Malawi is no exception and a simple google search leads you to numerous different pages created by various individuals both in and outside of Malawi to raise money for preparedness, supplies, and the unemployed due to the pandemic. Nothing drives innovation and the creation of new technologies like a global crisis. In the past, this has been clear with wars, but this global pandemic is no exception. New ways of funding, disease prevention, and living daily life with restrictions have been developed through this time and it is a positive development that can help not only through this crisis but also through future ones.

5.2.4 Discussion

WASH has become a high focus for civil society organizations and foreign aid departments in different countries. Several new actors have donated, and actors already established in the sector have upped their financing and projects. At the beginning of the pandemic, the government called for help from outside actors with hospital directors saying things like "You vowed to help people during bad or good times. Let not the virus scare you." (The Nation Online 2020j, para. 6). Throughout the summer and fall of 2020, a message of praise and gratefulness was visible through the news. A lot of increased funding, training, and development projects were being implemented all over the country, and more people were being reached. In addition, several foreign governments including Norway, Germany, the UK, and the US donated both money and supplies to the government for their Covid-19 response.

These projects and implementations are not only good for the Covid-19 pandemic but also so many other health aspects. Other diseases such as cholera, diarrhea, Ebola, respiratory diseases, and many more can be prevented through proper hand hygiene. These diseases are harmful in many ways. Firstly, for the direct health impact, but also stopping nutritional uptake, they cost in lack of school- and workdays, and of course, the financial toll on the healthcare system and the mental strain for the sick. In other words, if they are prevented, they help hunger, education attendance, and poverty

alleviation. Many NGOs have taken the opportunity with the building of handwashing facilities and toilets to focus on menstrual hygiene as well, promoting safe menstrual hygiene behavior, and having toilets at school, which has proven to increase attendance for teenage girls by as much as 40% (George 2013). Covid-19 is encouraging projects that help several aspects of society through increased WASH access.

5.3 The Involvement of United Nations Agencies

As the previous chapter highlights, the UN and particularly their agency UNICEF is one of the major players in WASH in Malawi. UNICEF supports and collaborates with many civil society organizations and the government for policy development, funds for projects, and hygiene promotion. However, they are also visible themselves in the work they do. UNICEF started with providing technical and financial support for the government of Malawi while it prepared its Covid-19 Response Plan before it even had a case of the virus in the country (UNICEF Malawi 2020a). UNICEF states that the MoH is carrying out all health-related activities and that it is leading the national health cluster for the Covid-19 preparedness (ibid). This is different from what the actual plan says, where MIWD is the leading ministry. Regardless of which ministry, all efforts taken on by UNICEF are government-led, and UNICEF will not work outside of their approval (ibid). UNICEF is working on the ground with other UN agencies and partners to provide handwashing to communities, medical kits to healthcare facilities, and tackling misinformation, so people know how to avoid getting sick (UNICEF Malawi 2021a). UNICEF has provided medicine and equipment to treat over 84,000 cases as well as buckets, soap, and chlorine for handwashing (UNICEF Malawi 2021b).

5.3.1 Evaluation reports

UNICEF Malawi has posted 24 evaluation reports of the Covid-19 situation in Malawi through 2020. The first situation report came on March 28, 2020, when there were zero confirmed cases, but the government had still declared a state of disaster to prepare for the pandemic (Schwenk, Tileva, and Frontini 2020a). Then UNICEF started with the latrine and handwashing facility building, the hygiene promotion, and the training of Rapid Response Teams (ibid). UNICEF and DFID were through their partner United Purpose installing four sets of latrines in treatment centers in four different districts,

installing additional handwashing facilities in the same centers, and 32 healthcare workers in the same districts were trained (ibid). Since this was before there has ever been a case, the focus was primarily on preparedness.

On July 6, 2020, another report was published claiming 1,877 confirmed cases (Schwenk, Fudong, and Frontini 2020). This report was released right after the change in government after the reelections that year, where the new president quickly spoke on the severity of the increasing cases and that new measures would be put in place (ibid). For their WASH target, UNICEF said in July 2020 that they wanted to reach 5,000 people with WASH supplies and that at that point, they had reached 3,999 (ibid). A few months later in October there had been 5,803 confirmed cases; however, new cases were very low in the fall of 2020 in Malawi (Schwenk, Tileva, and Frontini 2020b). At this point, UNICEF had surpassed their goal of reaching 5,000 people with WASH supplies and were already up to 6,909; however, they report still needing US\$ 55.6 million to respond to the pandemic properly (ibid). The first situation report of 2021 was published on January 13, 2021. Malawi had a rise in cases through December and January, so at this point, the cases were up to 9,991 and the second wave in Malawi was well on its way (UNICEF Malawi 2021c). There was also a stagnation in WASH development from UNICEF, and the number of people reached with WASH supplies remained the same (ibid).

We know the effects of handwashing on normal diseases such as diarrhea and respiratory disease, but also on dangerous reoccurring diseases such as cholera, Ebola, and now coronavirus. According to the UNICEF Malawi representative Rudolf Schwenk (2020, para. 2) there is an: "urgent need to build on the current momentum to make hand hygiene the backbone of public health interventions beyond the pandemic and create a culture of hand hygiene." The Government of Malawi, UNICEF, and other partners have committed US\$ 3.8 million to get fully functional sustainable WASH in schools; this includes solar-powered water systems and latrines for children and teachers (Schwenk 2020). However, this is not enough. Another US\$ 30 million will be needed to reach all schoolchildren in Malawi (ibid). This investment is needed and now is the time to go all the way with handwashing.

5.3.2 Discussion

Changing hygiene norms is as important as access because if the facilities are not used, they are wasted money and labor. In March of 2020, the Minister of Health said in a speech that 36% of Malawians had access to handwashing but only 11% used it (Sabola 2020). The numbers are different from government reports, but the message was clear: hygiene norms are a problem in Malawi. Messaging for safe hygiene practices has been highly used throughout the pandemic with everything from billboards to radio ads. Religious and traditional leaders have been a big part of spreading awareness in their communities as well as inform the government of lacking access in rural areas and other issues arising. These messages are not new to the Malawian population as previous scares of Ebola, and other epidemics in the past, have similar advice. Already, according to a journalist I spoke with, 52% of the hospitalizations are due to a reason that is preventable with clean water and proper hand hygiene. At the beginning of January, two senior Malawian cabinet ministers and two other senior political figures passed away to Covid-19. This really scared a lot of people and made handwashing rise even more, because as an interviewee said: "it's killing people who have access to the best of healthcare and so what about me? If it can kill ministers, what about me without a name? I'm just another person."

Informants say that the production of hand sanitizer has increased immensely in Malawi; however, the cost is still a problem. The elite in Malawi can buy it, and certain businesses in the cities have it at their offices, but it is not something the average Malawian can afford (ibid). When it all comes down to it, the bigger structural issue in Malawi that makes all other development so hard is poverty. An NGO representative said about the pandemic in rural Malawi "people don't go to the marked and expose themselves to danger of transmission because they want to. It is to get food on the table." In other words, the larger issue is simply that people cannot afford HWWS; although, in the end, as an informant pointed out, it will save people money if they buy soap instead of spending their life savings on hospital bills. There is a significant divide between the cities and rural areas. All my informants said that the cities are showing an extreme awareness of the issue, with handwashing buckets at every store and public

building; in addition to business offices having hand sanitizers at the entrance and so on. In rural areas, the case is different. There, water is often a rarity and often needs to be carried long distances every day. Then, the priority of the water is not handwashing, in addition, soap is expensive and the pandemic has not been able to make this easier in the rural areas. The exception in rural areas is schools and healthcare facilities that have experienced an immense increase in access and have been one of the main focuses of the pandemic.

5.4 Conclusion

Handwashing access and norms are still far from perfect in Malawi, and there is still work that needs to be done. UNICEF reports that as much as US\$ 30 million is still needed to have solar-powered water systems at all schools in Malawi. A global pandemic is also going to change behavior dramatically and quickly as we have seen all over the world. However, as we see in places that are starting to recover from the pandemic: humans quickly go back to their old ways. In addition, there is fear that the handwashing narrative right now is too Covid-19 specific and that these behaviors will not stay changed when the pandemic is over because people will see no reason for it anymore. This is important that does not happen in Malawi. Handwashing access needs to be sustainable, and norm change needs to be long-term to protect against countless deadly diseases after the pandemic as well.

Hand hygiene needs to continue to be a focus, and norms need to change. The surge in hand hygiene projects has been reported to have increased access and change behavior. Many NGOs are also using this opportunity to improve other aspects of development related to hand hygiene. A big difference in the collaboration now and earlier is that the government asked for the NGOs to help with the pandemic instead of the NGOs coming in and doing the projects that fit their own interests. This is a better aid policy and hopefully will continue moving forward. Still, the government needs to get order internally when it comes to who is in charge, so the coordination can improve and the focus can be on the projects and not who is in charge of them. Nonetheless, newspapers have recorded positive effects from the government's policing and donations.

In general, the messaging through 2020 got increasingly positive towards the handwashing development. This pandemic is and has been the perfect opportunity to do something about WASH access and behavior in Malawi and work towards SDG 6. A political science professor said, "now that the resources are there ... it can be used as an opportunity to push people to internalize handwashing." Although it is important to remember as more than one of the interviewees said: "change takes time." That being said, as far as my data shows, through government policing, increased funding of access projects and promotion of safe hand hygiene behaviors, the Covid-19 pandemic has overall in fact helped fast track handwashing development in Malawi.

6 Conclusion and Recommendations

In this study, I have examined Malawi's capacity to reach SDG 6 with a specific focus on the handwashing aspect of the goal. SDG 6 was chosen because it gets less attention than many of the other goals, and handwashing as the focus as the pandemic provides an ideal opportunity to develop in this sector. Malawi was chosen as the case study because of its low handwashing rates compared to other countries. I have done this study through a policy analysis, a newspaper article analysis, and semi-structured interviews. I have looked at how the three main actors involved, the government, NGOs, and the UN collaborate, and to what extent they use the theories of sustainable development, participation, and behavioral change in their strategies. Finally, I have explored how the Covid-19 pandemic has affected handwashing development in Malawi. In this chapter, I will start with a short summary of the thesis, then I will present my concluding arguments based on my findings before providing my recommendations for the road ahead.

6.1 Summary

The UN has set the SDGs after the member states agreed upon them as the continued way forward for global sustainable human development. One of these goals is SDG 6 about water and sanitation. Within this goal, water gets far more attention and funding than sanitation, and the global access statistics reflect this. Ever since the Covid-19 pandemic broke out in December of 2019, there has been an increased focus on handwashing in the world. Handwashing with soap is believed to be one of the most lifesaving inventions in human history; still, there is a lack of access worldwide and particularly in Malawi. In Malawi, only 10% of the population has access to basic handwashing facilities, a number that is much lower than the global average or even the Sub-Saharan average. This needs to be fixed, as preventable diseases cause a majority of the premature deaths in Malawi.

When implementing handwashing projects, several theories and approaches can be used. In this thesis, I have examined the use of sustainable development theory, participation theory, and behavioral change theory, as these are highly relevant to handwashing development and work well together. In general, theories have an oversimplified worldview as they need to, to be usable in several contexts. That is why several theories need to work together and be adjusted for the local setting. In addition, theories are not stagnant concepts, but fluid ideas in continuous evolution along with the world changing.

Sustainable development is a theory with a long history based on the wish for economic growth, distributed equally within the limits of the world. Many critiques argue that this is impossible, while others have hope it can guide a circular economy that can evolve with the world. Water is a renewable but finite resource that needs to be properly handled, so environmental degradation does not make it unsustainable. Participation theory has recently become frequently used in the rhetoric of development; however, it struggles with being a term that has taken on so many definitions it has lost its meaning altogether. There are numerous approaches to sanitation within participation such as PRA, RRA, and CLTS. The idea is that development should not be forced upon people, but rather that people have a right to determine themselves what they want. The point of behavioral change is to influence people through education or advocacy that certain behaviors need to be changed for the betterment of the community.

The first thing that needs to be established when discussing WASH access in Malawi is the complication in the ministry domains. The MIWD and the MoH have had a split responsibility for the WASH sector, causing miscommunication, making it harder to get projects implemented, and making accountability vaguer. There have been several disputes through the years about who has the jurisdiction, usually due to wanting the financial gain that comes with the responsibility. Secondly, it is important to note that the government is good at writing policies; however, lacking in implementation. This is due to several reasons, including underfinancing, understaffing, and lack of attention to WASH issues. However, the main problem is a lack of financial support that can be sufficient for reaching the full in-need population. The government has a large focus on

sustainability and participation in their policies; although again they are lacking in implementation.

The civil society is large in Malawi and the biggest implementers of development projects. Many of them base their strategies on sustainable development, participation, and behavioral change, but as I was unable to go to Malawi, I could not observe the true practice behind this rhetoric. The organizations themselves elaborate on their impact in the nation, which is clearly to gain support, and some of the numbers are inconsistent and have to be flawed. There are traditions for NGOs working with the government, although sometimes the NGOs bypass the government, and especially after the big corruption scandal in 2013, many no longer trust the government. The UN and particularly their agency UNICEF are in charge of many projects in Malawi and often help the government in their policy development. They are very focused on using the theories discussed in this thesis; then again, it is hard to say how much is rhetoric and how much is actually happening.

The Covid-19 pandemic has changed a lot about how we see handwashing and increased attention, funding, and projects within this sector. The water governance issues have remained through the pandemic. There was conflicting messages of responsibility between ministers and generally through the response. Malawi also annulled their 2019 elections at the beginning of 2020 and started the pandemic with a mistrusted government that people were protesting and did not trust to impose regulations. They had a new election in the summer of 2020 where a new president was elected and the focus could turn to Covid-19. Many NGOs, other states, and religious organizations aided through the pandemic with handwashing buckets and soap at schools and markets, and in the cities, there was a clear change in behavior through the policing of the government and the handwashing promotion. In the rural areas, the situation was different. Many villages only have one borehole and have to walk far to get to it and therefore can only bring so much water back that they need to prioritize drinking and cooking instead of handwashing.

6.2 Conclusion

All in all, based on my research I have concluded Malawi has the capacity in writing polices that can reach the SDGs. They are based on research, concur with international agreements and goals, and use sustainable development, participation, and behavioral change theory to some extent. Where the government is lacking is in implementation. *The Vision 2020* was a dream that no one believed in. No real attempt was made to reach even some of the ambitious targets, and there is no indignation that *The Vision 2063* will be any different. When it specifically comes to SDG 6, the policies are lacking specific strategies; especially, when it comes to handwashing. The overarching policies often lack mention of it at all, and the specific ones have no clear path for development. NGOs and the UN on the other hand, have much more specific ones.

The collaboration between the actors is varying. There are traditions and regulations put in place where the local entities have to approve work from NGOs or UN agencies to work in the area. This is often respected and works well because the local committees can themselves make sure that dual projects are not unnecessarily happening in the same area and decide somewhat what type of development happens in their districts. However, it does happen that the NGOs bypass them and carry out projects without approval based on their own interest and not the locals'. In addition, since the 'Cashgate' scandal, the government has lost a lot of the power over the aid money and even though they have some say in what it gets used for, it is within the frames set by the donors. Malawi is lacking in implementation ability, and UNICEF had to carry out the Covid-19 response because the government did not have the capacity to do it alone. Malawi is very reliant on aid, and it is hard to imagine that changing anytime soon, regardless of how much Malawi wants it to change.

How the actors use the theories discussed in this thesis in their projects is impossible for me to say without observing personally; so, this conclusion is based on the use in their rhetoric. Even though rhetoric far from guarantees the use in practice, it is still an important step in the right direction. Sustainability is a highly used term globally today, primarily due to the Sustainable Development Goals. Any company or organization in the world will claim to be working sustainably, and the WASH sector in Malawi is no

different. They all have it highlighted in their policy. The same goes for participation theory. Through years of research on it and trying to find ways to help without having a colonial approach to the aid, participation theory has become a norm, at least in the messaging. When it comes to behavioral change, it is very often a big part of the policy, even if it is not directly stated. Participation theory is used not only to avoid neocolonialism, but also because it drives behavioral change when the source of the development is coming from the people themselves. Although, outside factor, like a pandemic, can also play a huge factor in behavioral change.

Finally, I have concluded that the pandemic did in fact, fast-track handwashing in Malawi. All my sources point in that direction. The NGOs and the UN give out evaluation reports that state an increase in handwashing projects and access. Of course, these are self-evaluated and hold the level of trust that comes with that, but the other sources support them. The newspaper articles start the pandemic with a cry for help, stating that the country is not ready and the government will not be able to handle it. Through the summer of 2020, that changed and the messaging became more positive, talking about the help NGOs provided and the added access that was happening. It also pointed to the increased use and access in the cities and schools, which several interview subjects agreed to. Some interviewees even claimed that handwashing was becoming part of the culture. There is still a long way to go, but this is a step in the right direction.

One can speculate as to why handwashing fast-tracked during the pandemic. Some of the obvious reasons are increased funding for it and the treat of getting sick as a large incentive for behavioral change. However, I also believe the pandemic forced a better collaboration between the central government, the local government, and the NGOs. Many NGOs could not have the same workforce present as previously and had to rely on local sources more. In addition, I suspect that the fact that the government actually requested help from the NGOs, instead of the NGOs pushing their own agendas, helped the coordination, the ratification, and the implementation of the projects. A process where local authorities request aid from NGOs rather than the NGOs requesting to work

in their areas would be much more efficient and is my first recommendation for changes in the future.

6.3 Recommendations

This thesis could have been about any SDG in any low-income country. The point of it is to look at how the international community carries out development in disadvantaged areas. The SDGs are ambitious goals that the world as a whole has agreed to work towards, and continuous research is needed to find the best way to implement these projects, especially now, considering the implications the Covid-19 pandemic has had on the world. I have faith in the use of sustainable development theory, participation theory, and behavioral change; however, they need to actually be applied in the projects. In addition, further research needs to be done on the use of these theories in relation to SDG progress, as each project is context-specific and needs to be treated as such. The ownership of the development needs to remain locally.

As concluded, the handwashing has fast-tracked in the cities but not in the rural areas in Malawi during the pandemic. This rural/urban divide is not new and most of the countries that reached the MDGs also experienced massive urbanization. More research and focus need to be on rural communities and how to reach them. In Malawi particularly, the major structural issue that stands in the way of development is poverty. With the extreme poverty we see in Malawi, all personal money goes to food, and all water goes to drinking. Investing in WASH is a poverty reducer; however, it is hard to see that long-term when other issues are more currently pressing. To eradicate poverty in Malawi, the first thing needed is to end corruption so that economic development can improve and the financial investment can go to the intended projects instead of politicians. This is easier said than done, which is why poverty reduction in rural Malawi is a big subject that needs more research.

All in all, I think the pandemic shows that as an international community, we have the capacity to invest large sums of money in whatever we feel necessary. We have the theoretical tools to make long-lasting sustainable change happen. People are willing to

change their behavior and entire lifestyle, if the drivers for change are made clear enough. We have developed a further understanding for how connected the world is, and how what happens on one side of the Earth, affects the other side as well. We are all citizens of the world, not of the invisible borders we have made up. We are an international community, so why wait for the crisis to happen to help each other? Proactive is better than reactive. Let us decide now to do something, truly commit to the SDGs, and then make them happen.

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