

Committee: ECOSOC

Topic: Ensuring Accessible Water and Discussing the Commercialisation of Water

Student Officer: Noha El-Hajj

Position: President of non-GA

---

## Personal Introduction

Dear Delegates,

My name is Noha El-Hajj and I will be serving as the president of the Economic and Social Council during the 8<sup>th</sup> Champion Model United Nations conference. This will be my 7<sup>th</sup> conference overall and my third time serving as a Student Officer. I'm really looking forward to the debate and discussion of our topics.

MUN is an activity that I highly encourage you to pursue. It enables you to grow as an individual, interconnect and deepen your knowledge of the world. To me, it is the epitome of a platform that enables you to thrive, and hence I'm anticipating our soon-to-come fruitful debates in ECOSOC.

In this study guide I'm aiming to provide you with information that will hopefully mark a starting point for your in-depth research, regarding this issue. If you have any inquiries after reading this study guide, or need any clarification please don't hesitate to email me at [Noha2450@hotmail.com](mailto:Noha2450@hotmail.com) prior to the conference, and I will be more than glad to respond. I look forward to meeting you all.



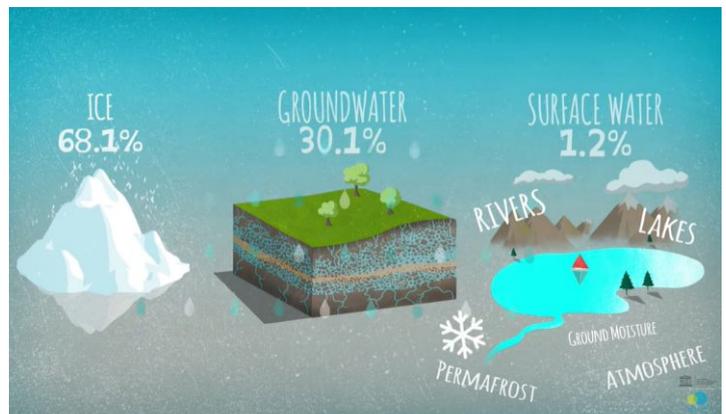
Yours truly,

Noha El-Hajj

## Topic Introduction

An estimated 90% of wastewater in cities in developing countries is discharged untreated directly into rivers, lakes or the ocean.<sup>1</sup>

The worldwide water crisis is alarming in recent years due to climate change, a growing world population and an increasing demand for water. Many countries are facing water shortages so severe that people's basic needs aren't being covered, while over half of the global population lacks safely managed sanitation service. Our aim is



Forms of Fresh water

to co-operate and recognize that more access to clean water will ripple effect leading to decreased frequency of waterborne diseases.

Another weighing factor to this crisis is the commercialisation of water. It involves the participation of the private sector, as a way to increase investment in water

---

<sup>1</sup> "The UN Water World Development Report." UNESCO, 2015, [www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/images/WWDR2015Facts\\_Figures\\_ENG\\_web.pdf](http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/images/WWDR2015Facts_Figures_ENG_web.pdf).

delivery networks, improve access for all sectors of the population and reduce the burden of public services on government finance.<sup>2</sup>

This guide aims to explore how the commercialisation of some water has been implemented, alternatives and how” water's meanings and values change as it moves across the hydrosocial landscape.<sup>3</sup> Moreover, it discusses the urgency and challenges of monitoring the water and sanitation and considers key implications for public policies.

## Definition of key terms

### Fresh water

Water that is not salty found in, glaciers, rivers, ponds, lakes, groundwater etc.<sup>4</sup>

### Commercialisation

---

<sup>2</sup> Unrisd. “Commercialization, Privatization and Universal Access to Water.” *Commercialization, Privatization and Universal Access to Water | Markets, Business and Regulation (2000 - 2009) | Research | UNRISD, Commercialization, Privatization and Universal Access to Water | Social Policy and Development (2000 - 2009) | Research |*, [www.unrisd.org/80256B3C005BB128/\(httpProjects\)/E8A27BFBD688C0A0C1256E6D0049D1BA?OpenDocument](http://www.unrisd.org/80256B3C005BB128/(httpProjects)/E8A27BFBD688C0A0C1256E6D0049D1BA?OpenDocument).

<sup>3</sup>Walker, Michael Madison, and Zimmermann. “Negotiating Access to Water in Central Mozambique: Implications for Rural Livelihoods, by Michael Madison Walker.” *Economic Anthropology*, Wiley Blackwell, [www.ideas.repec.org/a/bla/ecanth/v6y2019i2p222-233.html](http://www.ideas.repec.org/a/bla/ecanth/v6y2019i2p222-233.html).

<sup>4</sup> “Freshwater Definition and Meaning: Collins English Dictionary.” *Freshwater Definition and Meaning | Collins English Dictionary*, HarperCollins Publishers Ltd, [www.collinsdictionary.com/dictionary/english/freshwater](http://www.collinsdictionary.com/dictionary/english/freshwater).



The application of principles of cost recovery and profit maximization and private sector participation proposed as a way to increase investment in water delivery networks, improve access for all sectors of the population and reduce the burden of public services on government finance.<sup>5</sup>

## Sanitation

The systems for taking dirty water and other waste products away from buildings in order to protect people's health.<sup>6</sup>

## Depletion

Reduction in the number or quantity of something.<sup>7</sup>

## Hydrosocial territories

The spatial configurations of people, institutions, water flows, hydraulic technology and the biophysical environment that revolve around the control of water.<sup>8</sup>

---

<sup>5</sup> Unrisd. "Commercialization, Privatization and Universal Access to Water." *Commercialization, Privatization and Universal Access to Water | Markets, Business and Regulation (2000 - 2009) | Research | UNRISD, Commercialization, Privatization and Universal Access to Water | Social Policy and Development (2000 - 2009) | Research* | [www.unrisd.org/80256B3C005BB128/\(httpProjects\)/E8A27BFBD688C0A0C1256E6D0049D1BA?OpenDocument](http://www.unrisd.org/80256B3C005BB128/(httpProjects)/E8A27BFBD688C0A0C1256E6D0049D1BA?OpenDocument).

<sup>6</sup> "SANITATION: Meaning in the Cambridge English Dictionary." *Cambridge Dictionary*, [www.dictionary.cambridge.org/dictionary/english/sanitation](http://www.dictionary.cambridge.org/dictionary/english/sanitation).

<sup>7</sup> "Depletion: Definition of Depletion by Oxford Dictionary on Lexico.com Also Meaning of Depletion." *Lexico Dictionaries | English*, Lexico Dictionaries, [www.lexico.com/en/definition/depletion](http://www.lexico.com/en/definition/depletion).

<sup>8</sup> International, Water. "(PDF) Hydrosocial Territories: A Political Ecology Perspective." *ResearchGate*, 2016, Jan.



## Hydraulic technology

Include aqueducts and irrigation systems that deliver water, using gravity to create water pressure.<sup>9</sup>

## Remunicipalisation

This refers to the return of previously privatised water supply and sanitation services to municipal authorities.<sup>10</sup>

## Water governance

The political, social, economic and administrative systems in place that influence water's use and management. Essentially, who gets what water, when and how, and who has the right to water and related services, and their benefits.<sup>11</sup>

---

[www.researchgate.net/publication/292213790\\_Hydrosocial\\_territories\\_A\\_political\\_ecology\\_perspective](http://www.researchgate.net/publication/292213790_Hydrosocial_territories_A_political_ecology_perspective)

<sup>9</sup> Rouse, Margaret. "What Is Hydraulics? - Definition from WhatIs.com." *WhatIs.com*, TechTarget, 16 Jan. 2017, [www.whatIs.techtarget.com/definition/hydraulics](http://www.whatIs.techtarget.com/definition/hydraulics).

<sup>10</sup> "Remunicipalization." *Wikipedia*, Wikimedia Foundation, 3 May 2020, [www.en.wikipedia.org/wiki/Remunicipalization](http://www.en.wikipedia.org/wiki/Remunicipalization).

<sup>11</sup> Siwi. "Improved Water Governance." *Stockholm International Water Institute*, 19 Nov. 2018, [www.siwi.org/priority-area/water-governance/](http://www.siwi.org/priority-area/water-governance/).



## Background Information

### PART A: What is the Commercialisation of Water?

#### History of advocating for the privatisation of water

From the 1990s,<sup>12</sup> international financial institutions have been pushing nations and their municipalities to hand over their water to private corporations. This was on the predominant presumption that they would manage water more efficiently and provide service of better quality. Proceedingly, at the World Water Forum in 2000, senior World Bank officials stated that “there is no alternative” to privatisation.

#### Remunicipalisation as an alternative

In 2010, remunicipalisation would allow for efficiency savings accompanied by a decrease in tax, just like it did in France where 35 million euros were saved, accompanied by an 8% tax decrease. Likewise, following the remunicipalisation from French water multinational Suez in 2006, the new public water company AySA invested millions in improving infrastructure and expanded to provide for an additional 700,000 people. Improvements in the quality, service and costs of water were all observed as water via this way has been treated as a basic human right, rather than a product to generate profit for private companies.<sup>13</sup>

---

<sup>12</sup> “Turning the Tide of Water Privatization – the Rise of the New Municipal Movement.” *Rapid Transition Alliance*, 2019, [www.rapidtransition.org/stories/turning-the-tide-of-water-privatization-the-rise-of-the-new-municipal-movement/](http://www.rapidtransition.org/stories/turning-the-tide-of-water-privatization-the-rise-of-the-new-municipal-movement/).

<sup>13</sup> “Turning the Tide of Water Privatization – the Rise of the New Municipal Movement.” *Rapid Transition Alliance*, 2019, [www.rapidtransition.org/stories/turning-the-tide-of-water-privatization-the-rise-of-the-new-municipal-movement/](http://www.rapidtransition.org/stories/turning-the-tide-of-water-privatization-the-rise-of-the-new-municipal-movement/).



## PART B: Current Waste of water in the West

### Domestic use

The ways in which water can be wasted domestically can be from household leaks in pipes, to taps running when washing, to dishwashers. On average, 60% of the waste water produced by EU households is not recycled, some recycling is only 5% in some areas to 80% in others<sup>14</sup>. Thus a widespread initiative for recycling water by greywater plants etc is needed.

### Industry

Water is wasted in electricity production especially in countries like China. Some industries that use large amounts of water deploy it to produce food, refined petroleum, paper, chemicals, or metals such as aluminium, steel and iron. This accounts for around 40% of total water abstractions. Even worse, numerous global companies have manufacturing facilities situated in water scarce areas of the world.

<sup>15</sup>

### Agriculture

Predominantly, water is used to irrigate crops and sustain livestock. Currently the agriculture sector accounts for 70% of all freshwater withdrawals globally.<sup>16</sup> Water

---

<sup>14</sup> “The European Circular Economy.” *Newsletter European*, 8 Apr. 2016, [www.newslettereuropean.eu/european-circular-economy/](http://www.newslettereuropean.eu/european-circular-economy/).

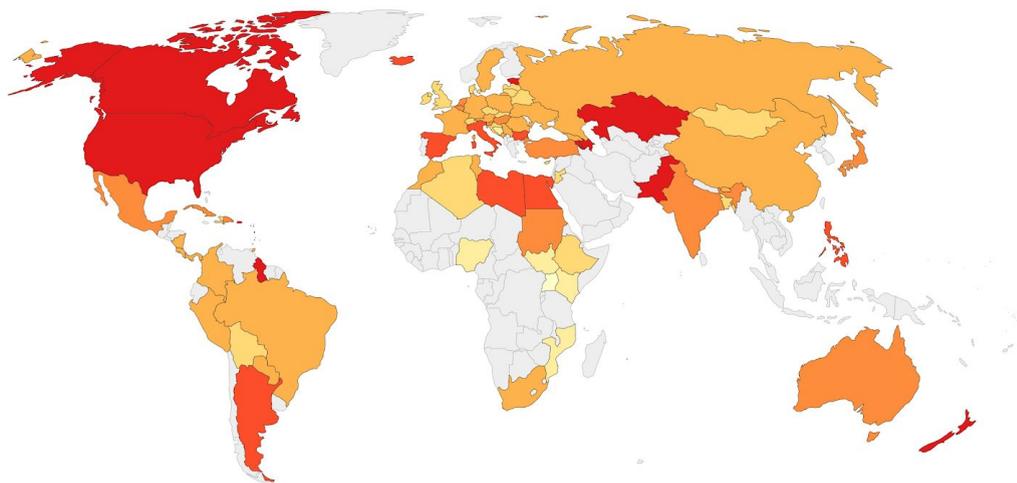
<sup>15</sup> “Industrial Water: Our Essential Guide to Pollution, Treatment & Solutions.” *Aquatech*, 29 May 2019, [www.aquatechtrade.com/news/industrial-water/industrial-water-essential-guide/](http://www.aquatechtrade.com/news/industrial-water/industrial-water-essential-guide/).

<sup>16</sup> “Water in Agriculture.” *World Bank*, 20 May 2020, [www.worldbank.org/en/topic/water-in-agriculture](http://www.worldbank.org/en/topic/water-in-agriculture).



pricing for farmers is very low prices for water delivered and used. They pay much less than households or industry, they lack proper incentives to reduce water waste during the irrigation of crops. Nevertheless, agriculture is not only heavily wasting water, but it also contributes to polluting it via fertilisers, animal effluents and pesticides running off into the waterways and groundwater.

Total water withdrawals from agricultural, industrial and municipal purposes per capita, measured in cubic metres (m<sup>3</sup>) per year.



Source: UN Food and Agricultural Organization (FAO) AQUASTAT

OurWorldInData.org/water-access-resources-sanitation/ • CC BY

Water withdrawals per capita 2015



## Part C: Impact

### Short-term

By 2025, 800 million people will have to cope with water scarcity.<sup>17</sup> With respect to marine pollution, 80% originates on land<sup>18</sup>—whether along the coast or far inland. Polluting materials commonly recorded are chemicals, nutrients carried from factory and farm sites. How does this get transported you may ask, via rivers and streams into the coast of bays. Our seas are also sometimes spoiled by oil spills and leaks—big and small and are constantly soaking up carbon pollution from the air.

### Long-term

The world’s population is estimated to reach 9.1 billion by 2050, where more than half the world’s population will be at risk of water stress, running out of water.<sup>19</sup> With this growth increased demand for water. Industry accounts for nearly 20% of our fresh water needs, and there are indications this demand will rise, hence leading to prices skyrocketing.<sup>20</sup> As stated by the High-Level Panel on Water (HLPW 2018),

---

<sup>17</sup> “Water and Wastewater Management Sector.” *EIB.org*, 2019, [www.eib.org/en/projects/sectors/water-and-waste-water-management/index.htm](http://www.eib.org/en/projects/sectors/water-and-waste-water-management/index.htm).

<sup>18</sup> US Department of Commerce, National Oceanic and Atmospheric Administration. “What Is the Biggest Source of Pollution in the Ocean?” *NOAA’s National Ocean Service*, 8 Oct. 2008, [www.oceanservice.noaa.gov/facts/pollution.html](http://www.oceanservice.noaa.gov/facts/pollution.html).

<sup>19</sup> “A Global Thirst: Water Use In Industry.” *GE News*, [www.ge.com/news/reports/global-thirst-water-use-industry](http://www.ge.com/news/reports/global-thirst-water-use-industry).

<sup>20</sup> “A Global Thirst: Water Use In Industry.” *GE News*, [www.ge.com/news/reports/global-thirst-water-use-industry](http://www.ge.com/news/reports/global-thirst-water-use-industry).



36% of the world's population already live in water-scarce regions, and Competing demands for water are adding pressure to the allocation of freshwater resources.<sup>21</sup>

## Major countries and organizations involved

### Britain

In 1989 in England and Wales, the provision of water and wastewater services was moved from the public to the private sector. This is because the government found it difficult to fund the maintenance of water facilities. Since then water has been recorded to be of high quality and in 2010, 99.96% of all tests met quality standards.<sup>22</sup> In 25 years time, Britain will not have enough water to meet demand, mostly as a result of climate change.<sup>23</sup>

### Zambia

Zambia is facing one of the greatest water crises. There is a wide lack of access to clean water, leading to higher rates of childhood malnutrition and mortality.<sup>24</sup> Investment and financing is an obstacle. Thus, accounting for this, organisations like USAID aim to provide 1.7 million Zambians access to sustainable water and

---

<sup>21</sup> "Wastewater? From Waste to Resource." *World Bank*, [www.worldbank.org/en/topic/water/publication/wastewater-initiative](http://www.worldbank.org/en/topic/water/publication/wastewater-initiative).

<sup>22</sup> Rowe, Mark. "Water Shortage in the UK: What's the Problem and How to Save Water." *Countryfile.com*, 8 Oct. 2019, [www.countryfile.com/news/water-shortage-in-the-uk-whats-the-problem-and-how-to-save-water/](http://www.countryfile.com/news/water-shortage-in-the-uk-whats-the-problem-and-how-to-save-water/).

<sup>23</sup> "24 Years Later: A Look at Water Privatisation in England and Wales." *Black & Veatch*, [www.bv.com/perspectives/24-years-later-look-water-privatisation-england-and-wales](http://www.bv.com/perspectives/24-years-later-look-water-privatisation-england-and-wales).

<sup>24</sup> "Water, Sanitation and Hygiene." *Related UNICEF Sites*, 23 July 2020, [www.unicef.org/zambia/water-sanitation-and-hygiene](http://www.unicef.org/zambia/water-sanitation-and-hygiene).



sanitation services by 2021.<sup>25</sup> This will be achieved by co-financing and aiding major structural improvements.

## India

More than half of India's districts are threatened by groundwater depletion or contamination. The water available per person has decreased by around 400% over the past 60 years.<sup>26</sup> The responsibility for water supply and sanitation at the central and state level is shared by mainly three ministries.

## Stockholm International Water Institute (SIWI)

SIWI was established in 2005. Its initiative is to develop and fund the enactment of water projects and programmes in partnership with UNDP country offices, government agencies, and other parties. In addition, they are involved in the water governance on global and national scales via contributing to international monitoring and assessment processes.

## European Investment Bank

---

<sup>25</sup> "Zambia." *Homepage*, [www.globalwaters.org/wherewework/africa/zambia](http://www.globalwaters.org/wherewework/africa/zambia).

<sup>26</sup> "Helping India Manage Its Complex Water Resources." *World Bank*, [www.worldbank.org/en/news/feature/2019/03/22/helping-india-manage-its-complex-water-resources](http://www.worldbank.org/en/news/feature/2019/03/22/helping-india-manage-its-complex-water-resources).



In 2019, it invested about 2.4 billion euros in the water and waste management sector, resulting in improved sanitation for 11.5 million people. Better access to safe drinking water for 10 million people. Less risk of flooding for 1.7 million people.<sup>27</sup>

## Timeline of events

<u>Date</u>	<u>Event</u>
March 1977	For the first time, in the Mar del Plata UN Water Conference water was acknowledged as a right declaring that “All peoples..have the right to have access to drinking water in quantities and of a quality equal to their basic needs”.
December 1979	The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) sets out an agenda to annihilate gender inequality in rural communities facing women in order to establish a basis of equity relevant to the water crisis as women are most at risk in underprivileged communities facing the water crisis,
December 1999	In the UN General Assembly Resolution A/Res/54/175 “The Right to Development”, article 12 of the Resolution affirmed that the right to clean water should be promoted on both a national and international level.

---

<sup>27</sup>“Water and Wastewater Management Sector.” *EIB.org*, [www.eib.org/en/projects/sectors/water-and-waste-water-management/index.htm](http://www.eib.org/en/projects/sectors/water-and-waste-water-management/index.htm).



November 2006	The Human Rights Council decision 2/104 declared that international human rights construct demands access to safe drinking water sanitation.
September 2010	The Human Rights Council Resolution A/HRC/RES/15/9 affirms that the rights to water and sanitation are part of existing international law and confirms that these rights are legally binding upon States. <sup>28</sup>

---

<sup>28</sup> “Decade, Water for Life, 2015, UN-Water, United Nations, MDG, Water, Sanitation, Financing, Gender, IWRM, Human Right, Transboundary, Cities, Quality, Food Security.” *United Nations*, United Nations, [www.un.org/waterforlifedecade/](http://www.un.org/waterforlifedecade/).

UN-Water. “Water and Sanitation Events during HLPF: UN-Water.” UN, 19 June 2020, [www.unwater.org/water-and-sanitation-events-during-hlpf/](http://www.unwater.org/water-and-sanitation-events-during-hlpf/).



## Relevant UN Resolutions, Events, Treaties and Legislation

### Resolution [A/64/292](#)

Thus during 2010 on the 28<sup>th</sup> of July, the General Assembly recognised the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realisation of all human rights. Through this resolution, nations and international organisations were encouraged to provide financial resources to aid LEDCs especially.

### Resolution [WHA64/2011/REC/1](#)

In May 2011, the World Health Organization (WHO), made a call to Member States "to ensure that national health strategies contribute to the realization of water- and sanitation-related Millennium Development. Further to the late realisation of water and sanitation being a human right, this urged all UN-Water members to take immediate action.

### Resolution [A/HRC/RES/18/1](#)

The new resolution passed in 2011 on September the 28<sup>th</sup> whereby the HRC furthered its commitment to the water human rights crisis. Hence it committed to providing the financial means to guarantee the safe and sustainable delivery of water and sanitation services to vital areas tackling the water crisis.



## Possible solutions

### Rural Areas

#### Building Wells

Shallow wells are very cost effective as by example in Kenya. Initially villages will be required to arrange and pay for the initial geological survey work to be done. After the well has been installed, the citizens should be educated on how the pump works, actions to take if it breaks and how to keep the water clean.

#### Filtration systems

SunSpring Hybrid is a portable Solar and Wind powered, self-contained Water Purification System. This prototype is capable of producing over 20,000 liters of water per day lasting for almost 10 years.<sup>29</sup> To add, this has been utilised in communities and specifically in schools.



SunSpring Hybrid

#### Education

A guidebook to educate safe and proper use of water in rural communities. To train citizens how to work with the wells incorporated so they are sustained and to educate them on how to manage water efficiently .Especially applied for wells when deploying groundwater.

---

<sup>29</sup> “SunSpring Hybrid.” *Innovative Water Technologies*, 1 Apr. 2019, <https://innovativeh2o.com/sunspring-hybrid-2>.

### Water safety plan

This generally involves a 4-step process for risk-management of water supplies.. Firstly, assembling a team, then designating a water supply. Thirdly analysing problems and risks, and finally improving the existing infrastructure and operation. After its installment there are systems to frequently monitor the temperature of water and check its turbidity with a test tube. It is an inexpensive and simple method to use.

### Urban areas

#### A water sensitive city

A city that provides an array of water sources at a range of different scales, allocated for many different uses. It has ecological benefits with a sustainable natural environment in place.

Citizens present in water sensitive communities should be taught to deploy water wisely such as conserving water in their homes and are actively engaged in decision-making on this matter.



### An efficiency assessment model

We have to identify the sustainability issues via this model involved to meet our water efficiency goals. Following the collection of data, presentation of the results and validation, reach a customised action plan for the implementation of identified beneficial changes.<sup>30</sup>



SDG6: Water & Sanitation

### MEDCs & LEDCs

### Mobilize financing

This means diversifying and relying on all sources available, national and international, public and private, as well as blended and innovative financing. In order to fund infrastructure and expand building capacities for access to water and sanitation(SDG 6).<sup>31</sup> In some areas PPPs (Private Public Partnerships) can facilitate the development of innovative technologies especially in agriculture that accounts for most water abstractions. These will increase agricultural output and be beneficial for farmers, water management, and the economy.

---

<sup>30</sup> Namatame, Takashi, et al. "An Efficiency Evaluation Model for Company System Organization." *SpringerLink*, Springer, Berlin, Heidelberg, 1 Jan. 1970, [www.link.springer.com/chapter/10.1007/978-3-540-36510-5\\_28](http://www.link.springer.com/chapter/10.1007/978-3-540-36510-5_28).

<sup>31</sup> "Achieving Universal Access to Water and Sanitation by 2030 The Role of Blended Finance." *OECD-Achieving Universal Access to Water and Sanitation by 2030 The Role of Blended Finance*, OECD, Aug. 2016, [www.oecd.org/water/Background-Document-OECD-GIZ-Conference-Universal-Access-by-2030.pdf](http://www.oecd.org/water/Background-Document-OECD-GIZ-Conference-Universal-Access-by-2030.pdf)

### Sustainable agriculture

This can be achieved via three steps. Firstly, strengthening and enforcing current water regulations in place. Secondly, creating incentives for farmers to improve agricultural water management of water and polluting fertilisers. Finally, eliminating policies that



Crop Rotation in Sustainable Agriculture

enable excessive water use pollution.<sup>32</sup> There are an array of benefits some of which are, less water pollution since no pesticides and fertilizers will be used and economically beneficial for the farmer as they receive a substantial salary and via research this reduces labor efforts for them and they receive 10 times the profit.<sup>33</sup>

---

<sup>32</sup> “Water and Agriculture.” *OECD*, [www.oecd.org/agriculture/topics/water-and-agriculture/](http://www.oecd.org/agriculture/topics/water-and-agriculture/).

<sup>33</sup> Rinkesh. “Methods and Benefits of Sustainable Agriculture.” *Conserve Energy Future*, 25 Dec. 2016, [www.conserve-energy-future.com/methods-and-benefits-of-sustainable-agriculture.php](http://www.conserve-energy-future.com/methods-and-benefits-of-sustainable-agriculture.php).

## Bibliography

### General

European Office, WHO, director. *How to Protect Drinking-Water – a Documentary on Developing a Water Safety Plan in Practice*, 20 Mar. 2019, [www.youtube.com/watch?v=z9g4wFmW4FY](http://www.youtube.com/watch?v=z9g4wFmW4FY).

“Water.” *United Nations*, United Nations, 2019, [www.un.org/en/sections/issues-depth/water/](http://www.un.org/en/sections/issues-depth/water/).

Siwi. “Improved Water Governance.” *Stockholm International Water Institute*, 19 Nov. 2018, [www.siwi.org/priority-area/water-governance/](http://www.siwi.org/priority-area/water-governance/).

Ahmad, Nehaluddin. “Human Right to Water under International Law Regime: An Overview.” *Taylor & Francis*, 2020, [www.tandfonline.com/doi/abs/10.1080/03050718.2020.1770618](http://www.tandfonline.com/doi/abs/10.1080/03050718.2020.1770618).

Winkler, Inga T. “The Human Right to Water.” *Elgar Online: The Online Content Platform for Edward Elgar Publishing*, Edward Elgar Publishing, 25 Jan. 2019, [www.elgaronline.com/view/edcoll/9781785368073/9781785368073.00028.xml](http://www.elgaronline.com/view/edcoll/9781785368073/9781785368073.00028.xml)

Walker, Michael Madison. “Negotiating Access to Water in Central Mozambique: Implications for Rural Livelihoods.” *AnthroSource*, John Wiley & Sons, Ltd, 18 Mar. 2019, [www.anthrosource.onlinelibrary.wiley.com/doi/abs/10.1002/sea2.12148](http://www.anthrosource.onlinelibrary.wiley.com/doi/abs/10.1002/sea2.12148)

Unrisd. “Commercialization, Privatization and Universal Access to Water.” *Commercialization, Privatization and Universal Access to Water | Markets, Business and Regulation (2000 - 2009) | Research | UNRISD, Commercialization, Privatization and Universal Access to Water | Social Policy and Development (2000 - 2009) |*



Research

|,  
[www.unrisd.org/80256B3C005BB128/\(httpProjects\)/E8A27BFBD688C0A0C1256E6D0049D1BA?OpenDocument](http://www.unrisd.org/80256B3C005BB128/(httpProjects)/E8A27BFBD688C0A0C1256E6D0049D1BA?OpenDocument).

“Achieving Universal Access to Water and Sanitation | UN Chronicle.” United Nations, United Nations, 10 Oct. 2017, [www.unchronicle.un.org/article/achieving-universal-access-water-and-sanitation](http://www.unchronicle.un.org/article/achieving-universal-access-water-and-sanitation).

“Achieving Universal Access to Water and Sanitation by 2030 The Role of Blended Finance.” OECD, OECD, Aug. 2016, [www.oecd.org/water/Background-Document-OECD-GIZ-Conference-Universal-Access-by-2030.pdf](http://www.oecd.org/water/Background-Document-OECD-GIZ-Conference-Universal-Access-by-2030.pdf).

“Turning the Tide of Water Privatization – the Rise of the New Municipal Movement.” *Rapid Transition Alliance*, 2019, [www.rapidtransition.org/stories/turning-the-tide-of-water-privatization-the-rise-of-the-new-municipal-movement/](http://www.rapidtransition.org/stories/turning-the-tide-of-water-privatization-the-rise-of-the-new-municipal-movement/).

Vidal, John. “Water Privatisation: a Worldwide Failure? | John Vidal.” *The Guardian*, Guardian News and Media, 30 Jan. 2015, [www.theguardian.com/global-development/2015/jan/30/water-privatisation-worldwide-failure-lagos-world-bank](http://www.theguardian.com/global-development/2015/jan/30/water-privatisation-worldwide-failure-lagos-world-bank).

“Decade, Water for Life, 2015, UN-Water, United Nations, MDG, Water, Sanitation, Financing, Gender, IWRM, Human Right, Transboundary, Cities, Quality, Food Security.” *United Nations*, United Nations, [www.un.org/waterforlifedecade/](http://www.un.org/waterforlifedecade/).

UN-Water. “Water and Sanitation Events during HLPF: UN-Water.” UN, 19 June 2020, [www.unwater.org/water-and-sanitation-events-during-hlpf/](http://www.unwater.org/water-and-sanitation-events-during-hlpf/).



“What Is a Water Sensitive City?” *CRC for Water Sensitive Cities*, 6 Dec. 2017, [www.watersensitivecities.org.au/what-is-a-water-sensitive-city/](http://www.watersensitivecities.org.au/what-is-a-water-sensitive-city/).

Cetrulo, Tiago B., et al. “Water Utilities Performance Analysis in Developing Countries: On an Adequate Model for Universal Access.” *Journal of Environmental Management*, Academic Press, 5 May 2020, [www.sciencedirect.com/science/article/pii/S0301479720305946](http://www.sciencedirect.com/science/article/pii/S0301479720305946).

Namatame, Takashi, et al. “An Efficiency Evaluation Model for Company System Organization.” *SpringerLink*, Springer, Berlin, Heidelberg, 1 Jan. 1970, [www.link.springer.com/chapter/10.1007/978-3-540-36510-5\\_28](http://www.link.springer.com/chapter/10.1007/978-3-540-36510-5_28).

European Office, WHO, director. *How to Protect Drinking-Water – a Documentary on Developing a Water Safety Plan in Practice*, 20 Mar. 2019, [www.youtube.com/watch?v=z9g4wFmW4FY](http://www.youtube.com/watch?v=z9g4wFmW4FY).

Water Prices for Agriculture.” *OECD*, [www.oecd.org/newsroom/waterpricesforagriculture.htm](http://www.oecd.org/newsroom/waterpricesforagriculture.htm).

“Hrw, Decade, Water for Life, 2015, UN-Water, United Nations, MDG, Water, Sanitation, Financing, Gender, IWRM, Human Right, Transboundary, Cities, Quality, Food Security, General Comment, BKM, Albuquerque.” *United Nations*, United Nations, [www.un.org/waterforlifedecade/human\\_right\\_to\\_water.shtml](http://www.un.org/waterforlifedecade/human_right_to_water.shtml).

“Statistics and Facts.” *EPA*, Environmental Protection Agency, 7 Nov. 2018, [www.epa.gov/watersense/statistics-and-facts](http://www.epa.gov/watersense/statistics-and-facts).

“Water and Agriculture.” *OECD*, [www.oecd.org/agriculture/topics/water-and-agriculture/](http://www.oecd.org/agriculture/topics/water-and-agriculture/).



## Images

1- WWAP, UNESCO, director. *Where Is Water? - The Water Rooms #2*, UNESCO WWAP, 30 Oct. 2015, [www.youtube.com/watch?v=b1f-G6v3voA](http://www.youtube.com/watch?v=b1f-G6v3voA).

2- Ritchie, Hannah, and Max Roser. "Water Use and Stress." *Our World in Data*, 20 Nov. 2017, [www.ourworldindata.org/water-use-stress](http://www.ourworldindata.org/water-use-stress).

3- "SunSpring Hybrid." *Innovative Water Technologies*, 1 Apr. 2019, <https://innovativeh2o.com/sunspring-hybrid-2>

4- *United Nations Water*, United Nations, 27 Aug. 2017, [www.facebook.com/UnitedNationsWater/photos/to-adopt-an-integrated-approach-to-sdg-6-reporting-and-thereby-help-policy-maker/10154760707677109/](http://www.facebook.com/UnitedNationsWater/photos/to-adopt-an-integrated-approach-to-sdg-6-reporting-and-thereby-help-policy-maker/10154760707677109/).

5- Slavikova, Sara Popescu. "10 Benefits of Crop Rotation in Agriculture." *Greentumble*, 5 Nov. 2019, [www.greentumble.com/10-benefits-of-crop-rotation/](http://www.greentumble.com/10-benefits-of-crop-rotation/).

