## Research Report

COMMITTEE: **UN Water** ISSUE: *Effective and eco-sustainable water use practices: How to train users more effectively?* PRESIDENTS: Raphaëlle HOLROYD & Eléonore HASLER

# Effective and eco-sustainable water use practices: how to train users more effectively?

#### **INTRODUCTION**

Hello! My name is Eléonore and I'm in 12th grade at the Lycée de Bellevue, in Martinique (a small French island in the Caribbean). And this year will be my 3rd participation in FerMUN! Outside of my Model United Nations club, I practice judo and tried many other sports such as artistic swimming, horseback riding, dancing and more...

But most of all, I realize every day the incredible opportunity we have to exchange between high school students who want to act for the future, around exciting issues that impact our societies today and will shape our world tomorrow.

This is why FerMUN represents for me this incredible opening to the world, real wealth for you, young delegates, and it is now up to you to make the most of it intellectually, educationally, but also socially and relationally during these 3 days.



## **KEY WORDS**

**Sanitation:** The process of eliminating unsanitary conditions in wastewater or stormwater to make it drinkable, and thus avoid the appearance and transmission of pathogens or sources of contamination related to the consumption of this water.

**Water deficit:** Water reduction is based on the cumulative difference between potential evapotranspiration and precipitation from the earth that can cause water stress.

**Sustainable development:** Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

**Surface water:** Water in direct contact with the atmosphere at the surface of the continents, such as a lake, a dam, a pond, or a river...

Freshwater: Water with very low salinity.

**Drinking water:** Water that can be drunk or used for domestic and industrial purposes without health risks.

**Sustainable Economy:** The sustainable economy takes into account social and environmental aspects in a way that meets the needs of the present without compromising the ability of future generations to meet their own needs.

**Blue Economy:** Sustainable use of ocean resources for economic growth, improved income and employment, and healthy ocean ecosystems.

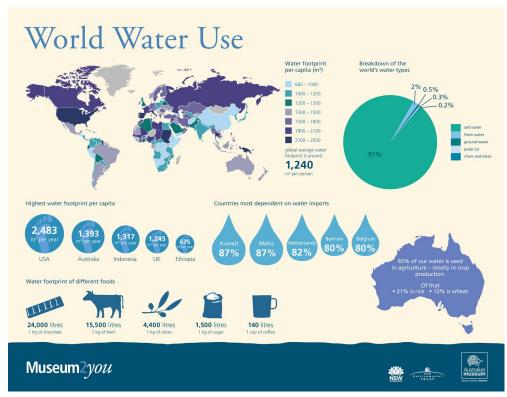
**Water stress:** A situation in which the water demand exceeds the actual water resources available, making water an insufficient resource to meet various human activities and environmental needs.

**User:** A private individual or company using a service, especially a public service, or borrowing from the public domain.

## **OVERVIEW**

Water is a common good essential to the life of humans, all animal and plant species. Water is in close interaction with life on the planet Earth. It must therefore be managed and used optimally by its various users in order to sustainably meet the many challenges it faces.

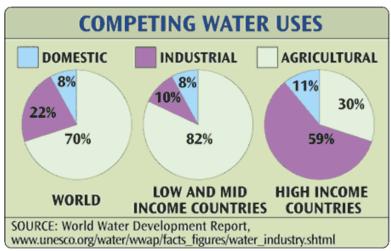
But while the world's water needs are constantly increasing, the resource itself is limited. Thus, the challenge for the years to come is to preserve the quantity and quality of water to ensure a quantity of fresh water available for the population.



#### I) Water in the world: an unequal distribution

Our planet is 70% covered by water. However, most of its surface water is frozen or salty. Thus, only 1% of the water on Earth is freshwater.

And this distribution of fresh water in the world remains very unequal. Indeed, only nine countries in the world hold 60% of the natural resources. These are Canada, China, Colombia, Peru, Brazil, Russia, the United States, Indonesia and India, while 80 states, in which 40% of the world's population lives, suffer from water shortages.



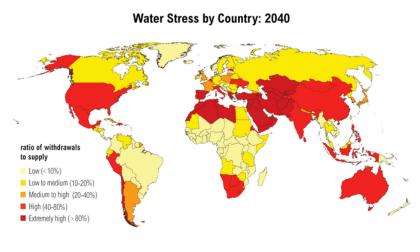
II) The use of water around the world

Sustainable water management is essential to ensure the economic development of all countries, taking into account the weight of economic issues related to water as in the industrial or agricultural sector, and to ensure access to quality water for all and guarantee the protection of the environment and biodiversity. This implies reconciling the economic, social and ecological

challenges of sustainable development of societies. However, countries are faced with new issues that make it increasingly difficult to manage water in an eco-sustainable way...

## III) The difficulties of accessing water on a global scale

The increase in population and economic activities leads to a growing demand for water. This can lead to pressure on aquatic environments, creating water stress that can alter the quantity and quality of water.



According to the United Nations World Water Assessment Programme, the world will face a global water deficit of 40% by 2030, five times more people will suffer from water scarcity by 2025 and 2/3 of the world's population will face water stress.

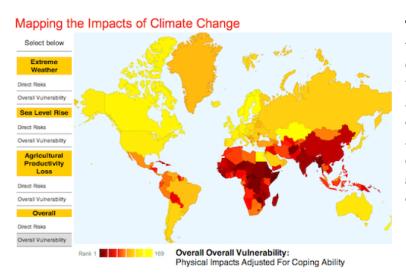
NOTE: Projections are based on a business-as-usual scenario using SSP2 and RCP8.5

For more: ow.ly/RiWop

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## IV) The consequences of poor water management in the world

#### A. Unequal harmful consequences...



The consequences of global warming, which can cause a lack of water, remain profoundly unequal for the populations that are victims. Indeed, while developed countries consume and pollute the most, it is the countries of the South that suffer the most from the consequences.

#### B. ... Which extends to all areas

The consequences of the lack of access to water and essential services such as hygiene or sanitation are numerous and affect education and the economy as well as the environment and health or even social issues.

#### Health and human consequences

According to WHO and UNICEF, every year, 780,000 deaths are caused by dysentery and cholera, diseases directly linked to access to safe drinking water and sanitation systems. Also, the discharge of more than 80% of wastewater, due to human activity, into rivers or seas causes the death of an average of 1,000 children every day, victims of diseases due to poor sanitation.

#### Environmental consequences

In addition, from an environmental point of view, the lack of sustainable access to water leads to uncontrolled exploitation of the resource with an environmental impact that, in some cases, can become irreversible.

## **RELEVANT UN TREATIES AND EVENTS**

28/07/2010: The human right to water and sanitation

The adoption of this resolution by the United Nations General Assembly is one of the fundamental steps on the issue of water because it recognizes the right to water and sanitation as a human right, that is to say, a universal and inalienable right.

31/01/1992: International Conference on Water and the Environment

This conference made an alarming observation: the world water situation is in danger, fresh water is rare and its use must be done with consideration.

2005-2015: The International Decade for Action on Water

The International Drinking Water and Sanitation Decade has provided 1.3 billion people in many developing countries with access to fresh water.

25/09/2015: Sustainable Development Agenda 2030

This recent program defines the 17 Sustainable Development Goals. The sixth goal aims at universal and equitable access to safe drinking water, hygiene and sanitation by 2030, especially for vulnerable populations. It also calls for sustainable management of this resource, recalling the importance of eco-sustainable behaviour by users, and mentions the reduction of the number of people suffering from water scarcity.

### **POSSIBLE SOLUTIONS**

#### Individual solutions

First of all, solutions aiming at limiting the waste of drinking water or better controlling its use could be implemented at the level of each household, by imposing, for example, a quantitative limit of usable water per household.

In addition, preventive solutions could be proposed in order to promote good eco-sustainable practices among users, such as the implementation of awareness and information campaigns among them as well as the development of these in the media and public places.

#### **Community-based solutions**

In addition, solutions could be implemented in communities such as schools to prevent water management issues, including teacher training and integration of water issues in schools.

#### International solutions

Nevertheless, we must not neglect the economic and state actors in the promotion of eco-sustainable practices within societies, by aiming, for example, to guarantee an international, collaborative and united management of water.

Regarding research, you could support the creation of an international fund dedicated to research and innovation around sustainable water management and promote it.

#### **Open-ended questions**

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Finally, here are some other avenues of reflection to be expanded to take into account all the issues related to this problem:

- 1. How could NICTs (New Information and Communication Technologies) help prevent and raise awareness about good eco-sustainable water use practices?
- 2. By whom and for whom could be trained for better water management to be delivered?
- 3. How can companies be encouraged to use better water management, especially in the most water-intensive sectors?
- 4. What solutions have already been implemented in your country or internationally to support better water management?
- 5. How can we support efficient climate justice at the international level concerning water management?
- 6. What solutions could be put in place for countries facing water stress or severe drought?

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