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Special Issue Editorial Notes

Time to Get Serious about Sustainable Water Management

Though it may appear that we have an unlimited supply of water, the world seems to be facing a shortage in clean water supplies and gradually approaching a global water crisis. With the recent outbreak of the COVID-19 pandemic, an intense need for good sanitation, hygiene, and adequate clean water has become apparent. The spread of COVID-19 virus can be prevented and encumbered with good sanitation practises such as handwashing. Sadly, according to the World Health Organization, one in three people do not have access to safe drinking water, two out of five people do not have a basic hand-washing facility with soap and water, and more than 673 million people still practice open defecation worldwide [1].

The water crisis has been a long-standing global issue. The world's freshwater supplies are disrupted by the rapid global population growth, overconsumption, climate change and pollution problems. Water supply disruption due to pollution at raw water source, mortality due to unsafe water supply and poor sanitation in underdeveloped countries, elevated surface water stress due to climate change and increased risks of flooding and drought, are among the challenges to be addressed urgently. The United Nations Sustainable Development Goal (SDG) 6 is on Clean Water and Sanitation, stressing the importance and urgency of this issue (Fig. 1). The goal aspires to ensure the availability and sustainable management of water and sanitation for all, and officially came into force on 1st January 2016 [2], indicating the growing concerns and increased attention on mitigation of water scarcity issues at the regional and global levels.

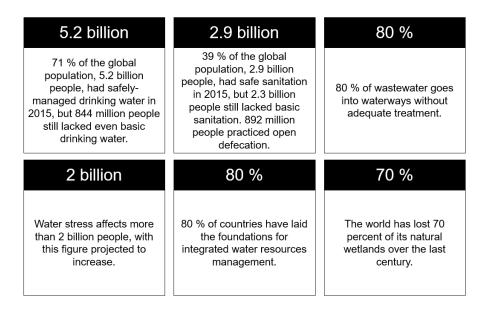


Fig. 1. [Adapted from The United Nations Development Programme, Sustainable Development Goals, Goal 6:Clean Water and Sanitation, https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-6-clean-water-and-sanitation.html].



Although water is a renewable natural resource, the availability of clean water for the needs of present and future generations is uncertain, with the growing problems of water supply. On a global scale, it is becoming increasingly evident that severe global water stress and water scarcity is inevitable. On a local scale as well, the water crisis is becoming a great concern, with water shortages, cuts, rationing and frequent incidences of water pollution affecting the life quality of citizens [3-5]. Thus, it is timely to get serious on sustainable water management, to ensure its availability for present and future times, hence the aims of the current special issue.

This special issue welcomes high-quality original contributions that focus on the sustainable management of water resources, both on a local and global scale, addressing the following and other relevant and related issues:

- Water resources and supply
- Water scarcity
- Water pollution
- Water wastage
- Water planning and distribution network
- Climate change and its impact on water resources
- Destruction and degradation of water catchment areas
- Inefficient use of water domestic, commercial, industrial, agricultural
- Water-related legislation
- Privatization of the water sector
- Sustainable water management
- Current treatment and management technologies
- Circular water and wastewater management
- Any other water related issues

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