Global Governance

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**Introduction**

Water serves as the critical link between the environment and the society, an essential resource for the growth and preservation of all human life. Water is fundamental for ecological development, sustainability and is crucial for socio-economic progression, food production and energy, vigorous ecologies and for the survival of human beings itself. Water is also a human rights matter. With the growth of the global population, the need to balance the usage of water around the globe is of critical importance so that communities everywhere get enough for their necessities. Sanitation and Water cannot be isolated, and they are vital for decreasing the affliction of disease and improving the well-being, economic productivity and education of inhabitants collectively around the world.

**Discussion**

**Water crisis and contamination**

Nearly one billion publics around the globe hardly have access to drinkable water, largely those people living in under-developed nations. The water predicament has engrossed these countries, intimidating the lives of the majority of the developing and underdeveloped world. The water and hygiene calamity claim more lives through infections and illnesses than any war has claimed through weaponries according to The U.N (Human Development Report). Roughly 1.4 million children expire from water unavailability of water or unsanitary drinking water. Diarrhea among children is closely related to lacking water resource, insufficient cleanliness, contamination of water with diseases that are communicable, and poor sanitization practices. It is estimated that only Diarrhea causes 1.5 million child deaths every year in underdeveloped countries. Noticeably this is one of the chief health concern in the world that ought to be addressed(Water Facts, 2012).

Polluted water and a lack of elementary hygiene are undermining struggles to end life-threatening scantiness and ailments in the third world countries. Worldwide, about 2.3 billion people do not have elementary hygiene conveniences such as latrines or toilets and a large number of people drink water from a system deprived of acceptable protection against sanitary dangers (Morrison et al., 2009).

**Challenges to Water Quality**

The quality of Water in underdeveloped and third world countries is frequently held back by lack of or inadequate enforcement of:

* Environmental agencies due to lack of resources or and political will
* Assimilation with other related concerns such as solid waste management
* market-based enticements for water treatment/pollution control
* [non-point source](https://en.wikipedia.org/wiki/Non-point_source) controls such as [agricultural runoff](https://en.wikipedia.org/wiki/Agricultural_runoff)
* understanding/responsiveness of issues and laws
* trans-boundary regulations
* water quality standards
* [emission standards](https://en.wikipedia.org/wiki/Emission_standards)
* chemical controls

As discusses above, the biggest problem contributing to the water predicament in developing nations is that the available water is not uncontaminated; therefore there is still the quality issue of that water, often leading to ailment Bartram’s (2010). According to the national water quality standards (2010), more than the fifth of the water supplies in major Asian cities do not measure up to the minimum standards.

**Pathogens**

One of the primary reasons that the water quality may be poor is because of pathogens contained in the water. These pathogens are usually from fecal matter dumped in the streams of water and rivers from where the water is gathered. These germs result in growing diseases that influence millions of inhabitants globally, for instance: malaria, E. coli, Guinea worm, cholera, giardia, typhoid, and numerous others. Diarrhea is the most prevalent of all the illnesses resulting from poor hygiene and water, and unfortunately, most of the people suffering from these avoidable ailments are not conscious of the causes. In large sums, mercury can be very unsafe to the human body and result in various diseases, therefore; the quality of the water needs to be checked not only for pathogens but for injurious chemicals such as mercury as well (Kleiner & Rajani, 2010). These problems of water and its quality are all components of the water emergency that need to be addressed (Palaniappan et al. 2010). It also confines financial efficiency and growth opportunities. Asian rivers are the most contaminated, and harmful bacteria levels from human waste in these water resources are almost three times greater than the world average. Furthermore, lead quantities in these streams and river are twenty times more than those in the developed nations.

On the other hand, commercial activities globally are draining aquifers much quicker than the usual speed of replenishment, and overwhelming the watercourses, forests, and swamps on which native watersheds rest on. Even though the resource of natural freshwater is restricted, the demand or in other words overuse of freshwater is snowballing twice the rate of populace growth. According to the estimation, if the percentage of people devoid of access to drinkable water remains, by the year 2020, approximately between 50 to100 million people, most of them children, will expire from avoidable water-related illnesses (Pistotnik). Also, because of the significance of water, the clash over its supply and the right to use is becoming complicated with the worldwide controlling actors taking more interest in the international systems.

**Global Governance Structures**

**The UN-Water**

The United Nations has been talking on to the worldwide predicament caused by the deficient supply of water to satisfy basic needs of the public and increasing the burden on the water resources of the world to meet human, agricultural and business needs.

High-Level Committee on Programs of the UN created UN-Water, in the year 2003, to foster greater information-sharing and cooperation among worldwide partners to focus concentration on the significance of freshwater and sustainable freshwater administration. Recent landmark agreements of the UN includes in the [2030 Agenda for Sustainable Development](http://www.un.org/sustainabledevelopment/development-agenda/), and the [2015 Paris Agreement on Climate Change](http://unfccc.int/paris_agreement/items/9485.php), the [2015 Addis Ababa Action Agenda on Financing for Development](https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2051&menu=35) and the [2015-2030 Sendai Framework for Disaster Risk Reduction](http://www.unisdr.org/we/coordinate/sendai-framework).

**Water for Life**

As component of the attempt to meet up the Millennium Development Goals, the [‘Water for Life’ International Decade for Action (2005-2015](http://www.un.org/waterforlifedecade/)) helped more than a billion people in poor nations gain access to harmless drinking water.

**ACP-EU Water Facility**

ACP-EU Water Facility was established in 2004, and it received funds from the EDF ([European Development Fund](https://en.wikipedia.org/wiki/European_Development_Fund)) to back projects concerning the improvement of water quality, sanitation, and overall water management governance in the ACP (Pacific countries, African, Caribbean)

**The Water Project**

It is a not for profit organization that plans and implements sustainable water schemes in [Uganda](https://en.wikipedia.org/wiki/Uganda), [Kenya](https://en.wikipedia.org/wiki/Kenya), [Sierra Leone](https://en.wikipedia.org/wiki/Sierra_Leone), [Rwanda](https://en.wikipedia.org/wiki/Rwanda), and [Sudan](https://en.wikipedia.org/wiki/Sudan). It has funded over 250 schemes that have improved access to clean water and sanitation for thousands of people.

**Critique**

Water crisis is a global issue and it is therefore, responsibility of the global organizations and establishments to cooperate with each other on the global level, so to eradicate the diseases and illnesses, excessive use of water, contamination of water and to supply clean water to the unprivileged. Unfortunately, the current global governance structure, international organizations that have the most authority are not playing the part that is more profitable and simple. Rather than exerting all of the energies and resources on political issues of water, these organizations such as UN and WHO and, establishments should focus more on providing resources to the common man and educate them about the situation. The global governance should provide capacity building and teach people how to save, clean and store water easily and cost-effectively.

**Recommendations**

Following are some recommendations:

**Improved sanitation and economic benefits**

The association between scarcity of water and hygiene access and the improvement objectives are apparent, and the answers to the crisis are identified and cost-effective. Studies illustrate that for every one dollar invested in enhanced hygiene translates into a middling return of approximately nine dollars. Those reimbursements are experienced particularly by underprivileged children and in the destitute communities that need them most.

**Surface water remedies**

Most of the population in third world nations gets their water from surface level sources, for instance, rivers, lakes, ponds, and streams. These natural sources of water are used by Humans and animals alike and therefore, deposit their waste because of which these sources get polluted causes diseases. These sources need to be ell purified before people use them.

**Rainwater Harvesting**

Rainfall provides the natural and most straightforward answer for drinkable water. Rainwater is the most affordable and sustainable source of usable water, particularly in the regions where there is much precipitation. There are many benefits linked with rainwater harvesting such as it has no harmful impact on the atmosphere; anyone can collect it easily resulting in saving time, resources and energy; and economically. Rainwater needs to be fully utilized either by individuals themselves or by an organized system. Rainwater can be collected through a variety of ways. The simplest technique is to preserve rainwater by using the rooftops as the collectors by installing barrels sand; the sand will filter the water. From this point, the collected water should be left on the roof in closed containers to let the ultraviolet rays of the sun exterminate any residual germs. From this undemanding process, people can have access to clean, cheap usable and drinkable water.

**Education**

Communities should be empowered through short-term and long-term outreach efforts and education. The States and international organizations should sponsor competence building among all. Environmental agencies and organizations should promote greater collaboration through education and practices to build understanding and coordination among people and governments around the world (Green et al., 2015).

**Chlorination**

The process of is one of the best innovations that can provide safe drinking water. The chlorination process destroys disease-causing microbes. The use of chlorine protects drinking water and is the most commonly-used sterilizer around the world. Chlorine is affordable, effective and extensively available.

**Boiling**

Boiling is another effective process of water purification. It is known to be the best method for making water drinkable and safe. Boiling kills the microorganisms that cause sicknesses, for example, the bacteria that causes of diarrhea. Though boiling large quantities of water can be costly still, it is better than using unhygienic water.

**Filters**

Another way to get rid of impurities from water acquired from streams, wells, rivers or other sources of water is through filtration plants or devices. Water filters can be used as an individual or community level. Filters can help extensively in reducing diseases. Filter usage can also preserve the resources formerly used to generate clean water. Use of filters and their positive outcomes assisted in shifting the attitudes, beliefs, and practices of the community in western Kenya toward sanitary water and filtration devices.

**Reuse**

One way to trim down the quantity of wastewater contamination and at the same time amplify water supply is the utilization of [wastewater](https://en.wikipedia.org/wiki/Wastewater) is to use the already used water from one process to be used in an added process where used water is tolerable. Reuse and recycling methods can consist of the recycling and management of used water from manufacturing plants intoxicated water or service treated water from mining for use in lesser quality uses. In the same way, wastewater re-use in commercial buildings for example in washrooms and toilets, etc.

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