

THIRD WORLD WAR FOR WATER

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Abstract

Modern history witnessed two world wars. These wars were fought for land and power. Since every major country is nuclear power now so, I hope there can't be any war over land as no one can afford a nuclear catastrophe. So, what can be the scene from where third world war will start?

As it is said "water is life" so this third and ultimate war for humanity will start over trivial fights for life which mean water. Green house effect is fastly causing global warming which in result will increase the melting of glaciers. This in turn will increase water flow in rivers for some years but after this rivers will start drying up. Right now many countries are sharing water through several international treaties like indo pak water treaty. Countries in the upstream will start violating the treaty to supply water to their own population. This will create a situation where countries in downstream will be forced to start a war. Even inside a country there will be civil war between states for water. Unlike other world war's, This war won't have a two sides. It will be a collection of several inter country and intra country wars.

This paper highlights the importance of water. its scarcity and numerous remedies for utilizing water.

Introduction

More than 3.4 million people die each year from water, sanitation, and hygiene-related causes. Nearly all deaths, 99 percent, occur in the developing world.

As the world's population grows, as available sources of fresh water begin to disappear, or as nations pollute the water supply, a lack of fresh water will no longer remain an isolated issue. It threatens the quality of human life by causing crop failures, transmitting water-borne diseases, and creating violent conflicts as governments, unable to cope with such complex economic and social issues, become more aggressive in an effort to satisfy their peoples or search for 'scapegoats' to justify their own failed policies.

Definition

Water is a chemical compound consisting of two hydrogen atoms and one oxygen. The name water typically refers to the liquid state of the compound. The solid phase is known as ice and gas phase is called steam. OR The fluid which descends from the clouds in rain, and which forms rivers, lakes, seas, etc.

Also Known As : Dihydrogen monoxide, H₂O (Refer 1 & 2)

Meaning

Water scarcity involves *water stress*, *water deficits*, *water shortage* and *water crisis*. The concept of water stress is relatively new. *Water stress* is the difficulty of obtaining sources of fresh water for use, because of depleting resources. A *water crisis* is a situation where the available potable, unpolluted water within a region is less than that region's demand.

More than 3.4 million people die each year from water, sanitation, and hygiene-related causes. Nearly all deaths, 99 percent, occur in the developing world. Lack of access to clean water and sanitation kills children at a rate equivalent of a jumbo jet crashing every four hours. Of the 60 million people added to the world's towns and cities every year, most move to informal settlements (i.e. slums) with no sanitation facilities. 780 million people lack access to an improved water source; approximately one in nine people. [The water and sanitation] crisis claims more lives through disease than any war claims through guns." An American taking a five-minute shower uses more water than the average person in a developing country slum uses for an entire day. Over 2.5X more people lack water than live in the United States. **More people have a mobile phone than a toilet.**

Pronunciation : WOTUR

Theoretical Background

Fifty years ago, when there were fewer than half the current numbers of people on the planet, the common perception was that water was an infinite resource. People were not as wealthy then as they are today, consumed fewer calories and ate less meat, so less water was needed to produce their food. They required a third of the volume of water we presently take from rivers.

Today, the competition for water resources is much more intense. This is because there are now over seven billion people on the planet, their consumption of water-thirsty meat and vegetables is rising, and there is increasing competition for water from industry, urbanization and biofuel crops.

The total amount of available freshwater supply is also decreasing because of climate change, which has caused receding glaciers, reduced stream and river flow, and shrinking lakes. Many aquifers have been over-pumped and are not recharging quickly. Although the total fresh water supply is not used up, much has become polluted, salted, unsuitable or otherwise unavailable for drinking, industry and agriculture.

To avoid a global water crisis, farmers will have to strive to increase productivity to meet growing demands for food, while industry and cities find ways to use water more efficiently.

Research

When then there is not enough potable water for given necessity, the threat of a *water crisis* is realized. The United Nations and other world organizations consider a variety of regions to have water crises such that it is a global concern Other organizations, such as the Food and Agriculture Organization; argue that **there are no water crises** in such places, but that steps must still be taken to avoid one.

There are several principal manifestations of the water crisis.

- Inadequate access to safe drinking water for about 884 million people
- Inadequate access to water for sanitation and waste disposal for 2.5 billion people
- Groundwater overdrafting (excessive use) leading to diminished agricultural yields
- Overuse and pollution of water resources harming biodiversity
- Regional conflicts over scarce water resources sometimes resulting in warfare

Waterborne diseases and the absence of sanitary domestic water are one of the leading **causes of death worldwide**. For children under age five, waterborne diseases are the leading cause of death. At any given time, half of the world's hospital beds are occupied by patients suffering from waterborne diseases.

According to the World Bank, 88 percent of all waterborne diseases are caused by unsafe drinking water, inadequate sanitation and poor hygiene.

A 2006 United Nations report focuses on issues of governance as the core of the water crisis, saying "**There is enough water for everyone**" and "**Water insufficiency is often due to mismanagement, corruption, lack of appropriate institutions, bureaucratic inertia and a shortage of investment in both human capacity and physical infrastructure**".

Official data also shows a **clear correlation between access to safe water and GDP per capita** It has also been claimed, primarily by economists, that the **water situation has occurred because of a lack of property rights, government regulations and subsidies in the water sector, causing prices to be too low and consumption too high**. Vegetation and wildlife are fundamentally dependent upon adequate freshwater resources.

Water deficits, which are already spurring heavy grain imports in numerous smaller countries, may soon do the same in larger countries, such as **China and India**. The water tables are falling in scores of countries (including Northern China, the US, and India) due to widespread over pumping using powerful diesel and electric pumps. Other countries affected include **Pakistan, Iran, and Mexico**. This will eventually lead to **water scarcity and cutbacks in grain harvest**.

Even with the over pumping of its aquifers, **China is developing a grain deficit**. When this

happens, it will almost certainly drive grain prices upward. Most of the 3 billion people projected to be added worldwide by mid-century will be born in countries already experiencing water shortages. Unless population growth can be slowed quickly it is feared that there may not be a **practical non-violent or humane solution to the emerging world water shortage**. After China and India, there is a second tier of smaller countries with **large water deficits — Algeria, Egypt, Iran, Mexico, and Pakistan**. Four of these already import a large share of their grain. But with a population expanding by 4 million a year, it will also likely soon turn to the world market for grain

According to a UN climate report, the Himalayan glaciers that are the **sources of Asia's biggest rivers - Ganges, Indus, Brahmaputra, Yangtze, Mekong, Salween and Yellow - could disappear by 2035 as temperatures rise**. It was later revealed that the source used by the UN climate report actually stated **2350, not 2035**.

Approximately **2.4 billion people live in the drainage basin of the Himalayan rivers**. India, China, Pakistan, Bangladesh, Nepal and Myanmar could experience floods followed by droughts in coming decades. In India alone, the Ganges provides water for drinking and farming for more than **500 million people**. The west coast of North America, which gets much of its water from glaciers in mountain ranges such as the Rocky Mountains and Sierra Nevada, also would be affected. **By far the largest part of Australia is desert or semi-arid lands commonly known as the outback.**

Findings

- More than **3.4 million people die each year** from water, sanitation, and hygiene-related causes. Nearly **all deaths, 99 percent, occur in the developing world**.
- Lack of **access to clean water and sanitation kills children at a rate equivalent of a jumbo jet crashing every four hours**
- Of the **60 million people added to the world's towns and cities every year, most move to informal settlements (i.e. slums) with no sanitation facilities**
- **780 million people lack access to an improved water source**; approximately one in nine people.
- The **water and sanitation] crisis claims more lives through disease than any war claims through guns**.
- An American taking a **five-minute shower uses more water than the average person in a developing country slum uses for an entire day**
- **Over 2.5X more people lack water than live in the United States**
- **More people have a mobile phone than a toilet.**

Suggestions

There are a **number of ways to save water, and they all start with you.** There are a number of ways to save water, and they all start with you.

- When **washing dishes** by hand, don't let the water run while rinsing. Fill one sink with wash water and the other with rinse water.
- Some refrigerators, air conditioners and ice-makers are cooled with wasted flows of water. Consider **upgrading with air-cooled appliances** for significant water savings.
- **Adjust sprinklers** so only your lawn is watered and not the house, sidewalk, or street.
- **Run your clothes washer and dishwasher only when they are full.** You can save up to 1,000 gallons a month.
- For cold drinks keep a pitcher of water in the refrigerator instead of running the tap. This way, **every drop goes down you and not the drain.**
- Monitor your water bill for unusually high use. **Your bill and water meter are tools that can help you discover leaks.**
- **Water your lawn and garden in the morning or evening when temperatures are cooler to minimize evaporation.**
- Wash your fruits and vegetables in a **pan of water instead of running water** from the tap.
- If your shower fills a one-gallon bucket in less than 20 seconds, **replace the showerhead with a water-efficient model.**
- When **buying new appliances**, consider those that offer cycle and load size adjustments. They're more water and energy efficient.
- **Shorten your shower by a minute or two** and you'll save up to 150 gallons per month.
- Upgrade **older toilets with water efficient models.**
- **Use sprinklers for large areas of grass.** Water small patches by hand to avoid waste.
- When running a bath, plug the tub before turning the water on, then adjust the temperature as the tub fills up.
- Collect **water from your roof to water your garden.**
- **Reduce the amount of lawn** in your yard by planting shrubs and ground covers appropriate to your site and region.
- When doing laundry, match the water level to the size of the load.
- **Teach your children** to turn off faucets tightly after each use.
- Remember to check your **sprinkler system valves periodically** for leaks and keep the sprinkler heads in good shape.
- **Know where your master water shut-off valve is located.** This could save water and

prevent damage to your home.

- To decrease water from being wasted on sloping lawns, **apply water for five minutes and then repeat two to three times.**
- Group plants with the same watering needs together to **avoid over watering some while under watering others.**
- Use a **commercial car wash that recycles water.**
- **Avoid recreational water toys that require a constant flow of water.**
- **Turn off the water while brushing your teeth** and save 25 gallons a month.
- **.Encourage your school system and local government to develop and promote water conservation** among children and adults.
- Set a kitchen timer when watering your lawn or garden to remind you when to stop. **A running hose can discharge up to 10 gallons a minute.**
- If your toilet **flapper doesn't close after flushing, replace it.**
- Next time you add or replace a flower or shrub, choose a low water use plant for year-round landscape color and save up to **550 gallons each year.**
- Install an instant water heater near your kitchen sink so you don't have to run the water while it heats up. This also **reduces energy costs.**
- Use a grease pencil to mark the water level of your pool at the skimmer. **Check the mark 24 hours later to see if you have a leak.**
- When the kids want to cool off, use the sprinkler in an area where your lawn needs it the most.
- Make sure your **swimming pools, fountains, and ponds are equipped with recirculating pumps.**
- **Bathe your young children together.**
- Keep a **bucket in the shower to catch water as it warms up or runs.** Use this water to flush toilets or water plants.
- When you are washing your hands, **don't let the water run while you lather.**

Conclusion

Saving a single drop of water will really make a difference **Save Water! Save our Planet!**

References

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