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Conflicts over Water: A Paramount Need to Solve Them

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Abstract: ***Even though there is so much water on earth most of it is sea water or it is frozen solid in large glaciers in Antarctica and Greenland. In large parts of the world, water is a scarce resource and there may come a time when majority or whole of the world will face the crisis of scarcity of water. Less than 0.01% of all water is available for human use in lakes, rivers, reservoirs, and easily accessible aquifers. There has been an increased rate of human consumption of water, the inadequate water supply and the climate changes that has occurred over the years, low rainfall. The Brahmaputra River continues to hold the potential to cause conflict between two of the world's most significant growing nations until collaboration is more deeply ingrained. About three fifths of water flowing in all rivers is shared by two or more countries. Conflicts arise when there is shortage of water or more than one person or nation is using the same source for water. Therefore, before things get out of hands and the whole world comes on the verge of fighting for water and the chaos start we need to regulate the usage of water resources and stopping the wastage of water at its minimum level.***

Keywords: conflicts, shortage, water resource, water wars, world war

1. Introduction

All life on Earth is dependent upon water; it is a crucial natural resource. In many cultures water has been denoted as a symbol of devotion and purity. In ancient Greek, Poseidon (God of the sea), who is known as the personification of the sea and is the oldest Greek divinity of water. The great epics of our country also mentions about The Ganges which was brought on Earth by King Bhagiratha. The Ganges is the most sacred river in the Hindu tradition, Hindus believe that bathing in The Ganges will give forgiveness for the sins we have committed and will also help in attaining moksha. History has shown that civilization's has began and flourished in places close to the areas in reach of freshwater. One of the examples of this would be The Indus Valley civilization or harappan civilization, which shows the oldest record of organized Human settlement. But even though Earth is a watery place in which about 71 percent of the Earth's surface is water covered and the ocean hold about 96.5 percent of all Earth's water. [1] Only about 12 percent can be used as drinking water.

Even though there is so much water on earth most of it is seawater or it is frozen solid in large glaciers in Antarctica and Greenland. In large parts of the world, water is a scarce resource and there may come a time when majority or whole of the world will face the crisis of scarcity of water. The scarcity of water is not at global level as of now but it is an issue which is majorly faced in some parts of the world as of now. It is due to the distribution of water on the Earth surface and on top of that much of it is wasted and polluted. There has been an increased rate of human consumption of water, factor like climate change which result in drought. Conflicts over water is not an new issue that is happening in today's time but we can see conflicts happening from the earliest of 2500 BC when the Lagash-Umma border dispute [2] in mesopatamia country happened and now to recent times like On October 11, a fight over the laying of water pipes in Dimirisena village in Brahmagiri, Puri district (Odisha), India kills two and injures more than ten.[3] or when Ukraine blocks Crimea from access to 85% of their water supply from the Dnieper River to add pressure to Russia in the ongoing fight over control of the region. Citizens of Crimea are forced to ration water.[4] Therefore, before things get out of hands and the whole world comes on the verge of fighting for water and the chaos start we need to regulate the usage of water resources and stopping the wastage of water at its minimum level.

Major Causes of Conflicts Over Water

Major part of the water in the world is either salt water or polluted water that is 97.5% approximately. The 70% of remaining 2.5% is frozen in form of glaciers and the polar ice caps. Worldwide less than 0.01% of all water is available for human use in lakes, rivers, reservoirs, and easily accessible aquifers.

About three fifths of water flowing in all rivers is shared by two or more countries- in 263 river basins in 145 countries, where two fifths of the worlds population lives.[5]

Sources like a lake, a river, or an underground aquifer crosses national borders. As these are the natural resources and doesn't follow boundaries it is often difficult to know who the rightful owner is and it is often questioned. There are some groundwater bodies and aquifers that are shared by as much as 6 countries. The Amazonas that is shared by Bolivia, Brazil, Colombia, Ecuador, Peru and Venezuela. The Lake Chad Basin that us shared by Chad, Niger, Nigeria, Cameroon, Central African Republic and Algeria.[6]

Conflicts arises when there is shortage of water or more than one person or nation is using the same source for water due to the population density and the shortage of drinking water or fresh water. Every nation wants to have as much resources as they can acquire. It is a human nature that we all witnessed in the Covid phase. We saw people buying

products on bulk and that started to leave nothing for other users and then everyone was doing the same it was like a war to get the things first and to acquire as much as they can.

The population is increasing hastily as of now it is 7.98 billion and it is expected to reach 9.8 billion in 2050 and 11.2 billion in 2100 according to the united nations report. As the population is growing water consumption is continually increasing worldwide.

The other causes for these conflicts would be the inadequate water suppy and the climate changes that has occurred over the years, low rainfall. Water is not only consumed by people for their daily use purposes like drinking, cooking, bathing etc but also is used in Industries and for agriculture etc.

In recent time the industrial sector has thrived in its production and uses approximately 19 percent of total water. All this is steadily increasing the list of regions which are suffering from insufficient water supply. Also if the access to water to regions is limited, the societal standard of living will also decline sharply which will lead to inner-societal tensions. These tensions are articulated in allocation conflicts between, for instance, agriculture and industry, urban and rural populace, or between different ethnic groups. The degree of these tensions, the political constitution of a state and the particular climatic and hydrological conditions of a region influence the degree to which such water conflicts are prone to the use of violence.

Some of the water conflict to watch in recent times

China-India: The Brahmaputra River

A 2,900 km river with its source in Tibet, the Brahmaputra passes through the Indian state of Arunachal Pradesh before joining the Ganges and emptying into Bangladesh's Bay of Bengal. It is regarded as a valuable resource in each of the three nations that it passes through. For energy-starved China, it provides hydroelectricity; for India and Bangladesh, it is a vital source of agricultural life in an otherwise overcrowded and arid region. The Assam plains of India, where the Brahmaputra River plays a significant role in the country's agricultural sector, have recently become concerned due to a number of hydroelectric projects that China is building on its Tibetan plateau. Some analysts think that these projects may lessen the Brahmaputra's flow through India, further compromising the already precarious water situation there. Although the Modi and Xi Jinping administrations have lately taken certain efforts, mostly in the shape of an information sharing agreement for hydrological data, there is still no complete bilateral treaty in place for the sustainable management of the Brahmaputra River. The Brahmaputra River, however, continues to hold the potential to cause conflict between two of the world's most significant growing nations until collaboration is more deeply ingrained.

Turkey-Iraq: Ilisu Dam and the Tigris River

The long-running Southeastern Anatolian Project's Ilisu Dam on the Tigris River close to the Syrian border is the final piece that Turkey's recently re-elected Erdogan government has been eager to complete. The Ilisu Dam is the most recent in a long line of Turkish initiatives designed to harness the hydroelectric potential of the Tigris and Euphrates rivers. When finished, the Ilisu Dam will produce 1,200 MW, or roughly 2% of Turkey's energy requirements.

This is a long-standing international water controversy since the Southeastern Anatolian Project required the construction of about 22 dams and 19 hydropower units in the Tigris-Euphrates basin. Iraq and, to a lesser extent, Syria are the main losers in Turkey's upstream activities. The waters of these rivers, which traditionally provided the seasonal marshlands required for food production, have historically been enjoyed to the greatest extent by Iraq. However, even before the Ilisu Dam was finished, these waters had already started to recede over the previous ten years.

In fact, the present drought in northern Iraq and Syria has lasted for so long that some researchers are unsure if it has anything to do with ISIS' expansion in the area. Some of the more extreme predictions state that by as early as 2040, the Tigris and Euphrates rivers won't have enough flow to reach the sea because of a combination of climate change and upstream dam development.

Why there is a paramount need to solve them

Although few disputes over water have resulted in bloodshed, most of these disputes have started in regions where violence is common, and most of these disputes could have turned violent. The destruction of the social infrastructure that supports health, including systems that provide freshwater, forced migration, which typically reduces access to freshwater, and the diversion of resources, including those for main infrastructure, are all potential outcomes of violent conflict over water, like other armed conflict. These outcomes can include death, injury, illness, and long-term physical and mental impairment. Although few disputes over water have resulted in bloodshed, most of these disputes have started in regions where violence is common, and most of these disputes could have turned violent. The destruction of the social infrastructure that supports health, including systems that provide freshwater, forced migration, which typically reduces access to freshwater, and the diversion of resources, including those for main infrastructure, are all potential outcomes of violent conflict over water, like other armed conflict. These outcomes can include death, injury, illness, and long-term physical and mental impairment.

How we can solve them

Water-related disputes can be avoided in a number of ways. Measures to increase the availability of water include

1) Reducing water use, such as by reducing wasteful uses and increasing efficient ones;
2) Improving the availability of clean water, such 1as by reducing industrial pollution and sewage contamination of water, improving sewage and wastewater treatment, and improving watershed management;
3) Establishing and maintaining new groundwater wells; and (4) designing and implementing new watershed management systems.

Before a dispute over water boils over—that is, before it turns violent or has other negative effects—another set of strategies seeks to put an end to it. Among these preventive measures are:

1) Laws and rules at the municipal, state or provincial, national, or international levels
2) Proactive collaboration between nations or between states or provinces within nations; and (3) mediation and arbitration.

Over 3800 unilateral, bilateral, or multilateral declarations or conventions, including 286 treaties, have been made regarding water on a global scale. Additionally, there are a lot of local, state or provincial, and national rules and regulations around the world pertaining to water use. Both existing rules and regulations need to be strengthened to ensure their compliance with contemporary challenges, and new ones need to be created.

Proactive cooperation can assist in resolving water-related disputes as well as in preserving social, environmental, and economic stability as well as the general public's health and food security. Additionally, it can aid in establishing enduring peace by preventing violent water-related conflicts. The Nile Basin Initiative and the Good Water Neighbors Project11 are two instances of this kind of collaboration in the Middle East.

In order to protect shared water resources, Israeli, Jordanian, and Palestinian communities have joined forces under the Good Water Neighbors Project, which was founded in 2001. This collaboration has greatly improved the local water sector and promoted regional peace. Nine nations have cooperatively developed the Nile as part of the Nile Basin Initiative, which got started in 1999. As a result, substantial socioeconomic benefits have been shared and regional peace and security have been supported.

In other parts of the world, there is also a lot of collaboration around water use. For instance, Bolivia and Peru, who share Lake Titicaca, established the Autonomous Water Authority, which has allowed these nations to collaborate on the management of water resources. Examining the status of the six-nation Aral Sea freshwater basin provides another fantastic illustration of cooperative water use. Due to water diversion, which dried up two of the sea's main sources of water and caused environmental destruction, the sea's surface shrunk to 10% of its original size between the 1960s and 2007. The Kok-Aral Dam is now complete, and the Aral Sea is starting to fill once more.

Women's roles are frequently inappropriately ignored while men control the majority of choices about water policy. In the majority of underdeveloped nations, women collect water and decide how to use it mostly for drinking and personal hygiene. Furthermore, women produce 70% of the food in underdeveloped nations, despite the fact that this uses a significant amount of water and that women are underrepresented in water policy when it comes to this issue. Promoting gender equality and empowering women is one of the Millennium Development Goals (MDG) 3, however it has not yet been fully accomplished.

Despite the significant obstacles to peace that are presented by ongoing and impending disputes over water, there is cause for optimism that these threats can be turned into possibilities. According to what the UN has said:

Despite widespread perceptions that water basins shared by countries tend to engender hostility rather than collaborative
solutions, water is an often untapped resource of fruitful cooperation.[7]

2. Conclusion

Despite the significant obstacles to peace that are presented by ongoing and impending disputes over water, there is cause for optimism that these threats can be turned into possibilities by making laws and rules at the municipal, state or provincial, national, or international levels; By proactive collaboration between nations or between states or provinces within nations; And by mediation and arbritration.

Improving the availability of clean water, such as by reducing industrial pollution and sewage contamination of water, improving sewage and wastewater treatment, and improving watershed management; establishing and maintaining new groundwater wells; and designing and implementing new watershed management systems are also the measures that we can take to overcome the issue.

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