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Short Communication

Water is Life, Water is Food. Leave no One Behind

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Water plays the most effective role in the existence of the living world. Water not only satisfies our thirst but also relieves physical exhaustion. We consume 80% of our daily calories as water. Regular water consumption has been demonstrated to lower body weight, which in turn lowers the risk of cancer. From headaches to stomachaches, water is a natural remedy. Water is necessary for all types of wildlife, plants, and aquatic life. The idea of human rights is predicated on access to adequate and safe drinking water. Environmental scientists predict that one of the world's most difficult concerns soon will be the availability of clean water. Our goals for environmentally sustainable economic development must place a high priority on the wise use and management of water.

Water is the only food we consume during the day that is devoid of calories, fat, sugar, and other nutrients. Our body's "cell" protoplasm is 90% water. This protoplasm shrivels and dies if the organism lacks water for any cause. The cell's life span is consequently shortened. The body sweats more in hot temperatures, and perspiration removes water and salt from the body as metabolic functions progressively come to an end and the organism approaches death. Long-term inadequate water supply results in several issues. Stroke risk is increased by dehydration. Due to excessive water loss, the body can occasionally become dehydrated. Consuming contaminated water can result in serious problems or even death. Water is therefore referred to as a Fluid of Life.

Water is the second element for sustaining human life after oxygen. Human existence is impossible without water. Human blood and cells receive oxygen and other nutrients from water. Water makes up 25% of the human body's oxygen supply. The World Health Organization estimates that an average individual needs more than 20 liters of water every day to stay healthy. Regular water consumption helps reduce stress and improve physical strength. Humans' circulatory systems are improved by water, which lowers high blood pressure. Despite an increase in the usage of high-end cosmetic products, British researchers have discovered that maintaining a regular water level in the skin helps to keep the skin healthy and minimize wrinkles.

Our drinking water is filtered by the kidney! This filter is ineffective, though, above a certain point. Children and the elderly have lower kidney function. When sodium levels in the blood fall too low (hyponatremia), the body's cells enlarge. The swelling of the brain cells eventually causes dizziness or unconsciousness. It can even lead to death. Deaths due to overhydration are more common in marathon runners or military training. Patients with heart, liver, or kidney disease are advised by their doctors to consume water sparingly because consuming too much of it might be harmful.

Liquid water is essential for life on Earth because it acts as a solvent. Water is required for basic chemical reactions to occur in the cells of animals, plants, and microorganisms. The chemical and physical characteristics of water allow it to dissolve more things than other liquids. Heat conduction, surface tension, a high boiling point, a low melting point, and light transmission are some of the additional characteristics of water. Both energy and water are required for both productions to occur. Hydroelectric plants currently produce 16% of the world's electricity. Apart from this, 80 percent of the energy is generated from thermal electricity, which is not possible without water.

Rising global temperatures and an insufficient water supply compared to demand are disrupting agriculture and posing a threat to human food security in the twenty-first century. Water shortages were also a contributing factor in Egypt's 2011 revolt against the government, which was sparked by a catastrophic failure of food crop production. Eighty percent of the agricultural area in sub-Saharan Africa has been damaged by excessive drought, and the rising seas have made many water sources unsafe for human consumption. Scientists have termed climate change as the main reason behind the water crisis. Floods and droughts destroy sourc-

es of fresh water, leading to the spread of various waterborne diseases such as cholera, diarrhea and typhoid.

In India, there will be at least 1.3 billion people without access to a source of safe drinking water by 2030. China also has a severe water shortage. The northern region of the country has groundwater that is unsafe for human consumption in 70% of cases. In the next 4 to 5 years, 30 million people in China may become migrants due to lack of water. Besides, Pakistan, Egypt, Mexico, Saudi Arabia and Yemen are also on the list of critical countries. The amount of fresh water decreases by 20% for every degree that the temperature rises, according to studies by the United Nations Panel on Climate Change. The organization has also named the lack of access to safe and clean water as one of the biggest issues facing the globe.

The total amount of water on earth is roughly 97.3 percent salt water and 2.7 percent fresh water. About 69% of the world's fresh water is underground about 30% is stored in polar ice caps and only 1% is in rivers and other sources. Fresh water is also becoming scarce due to increasing global warming. For example, the sea level is rising due to the melting of the ice caps in the polar regions. This increases the intrusion of saline water into the coastal areas. Also, arsenic, mercury, iron, chromium, nitrate, fluoride and other metal substances and pollutants in underground water are one of the causes of clean water shortage. It is now necessary to reconsider how water is managed globally to address the issue at hand. Besides, steps must be taken to ensure proper use of underground water resources or soon the world will be engaged in a terrible war where water will be the biggest weapon, not guns, missiles or nuclear bombs. Ground water should be used only as drinking water.

There is increasing pressure on groundwater to meet the food and other needs of a growing population. About 50 percent of the world's groundwater is used for drinking and 40 percent for agricultural use. Bangladesh uses underground water for 78% of its overall irrigation needs. Due to over extraction of groundwater, the pressure on natural water resources is constantly increasing. To cope with this pressure, the upstream countries in the river basin are building huge dams or dams to save the amount of water needed for agriculture and other purposes. Due to the construction of dams in the upstream countries, the flow of water in the downstream countries is decreasing. Which is giving extreme loss to the low-lying areas. There are 276 transboundary river basins in the globe, and 40 percent of the world's population relies primarily on these rivers for its water supply. To ensure safe water for all in the world, good relations and a cooperative environment among neighboring countries are very important.

Important and effective measures of water use are water reuse and seawater desalination. This method is currently most used in the Middle East and the West. Qatar, Israel and many other countries in the Middle East are using salt water from the sea and purifying it for controlled cultivation. Various developed countries of the world including Japan use two types of water for daily use. According to government regulations, underground water is used for drinking water in all residential-non-residential, public-private buildings and surface water is used on the other line for other uses. Many buildings have systems for filtering and reusing used surface water. Besides, in many countries of the world rainwater is collected, filtered and used as drinking water.

A growing water crisis could cause extreme instability worldwide. A time will come when people have no drinkable water. As a result, people will be faced with dripping water. Acute water scarcity is fueling regional conflicts in Latin America, the Middle East, North Africa and South Asia. According to the latest study by the American Water Works Association, the recent unrest in the Middle East and North Africa is due to the destruction of water resources. Experts say that the shortage of water in the country and interstate disputes may lead to the third world war in the world and because of this, the availability of safe and clean water will be the biggest challenge of the future world. As the amount of fresh water is decreasing day by day, certainly, that the dominant countries of the world will soon fight for this specific amount of water resources.

The world's population will increase and therefore more food will be needed, and water consumption will also increase. In this case, considering the need for water, many have suggested changing the diet. About 90 percent of developing countries' water is used for irrigation and about 70 percent of the world's water is used for agriculture. Therefore, reducing the consumption of food that consumes more water in production can be a sustainable measure. We need to make careful and realistic plans for water resources. Bangladesh's water resources are going to be endangered due to the construction of dam after dam outside our borders. In this rain-fed country, steps must be taken to retain water during the monsoon season, which is difficult but possible. For this, all rivers, canals and estuaries can be converted into reservoirs or possible.

Ten nations worldwide suffer from acute clean freshwater shortages, according to a survey conducted by World Vision in 2022. Unfortunately, the top 10 countries on this list are home to two-thirds of the world's population. According to research published by the World Bank, 80% of pipeline water contains E. coli bacteria. The presence of this harmful organism has also been found in ponds

and tubewell water. E. coli bacteria are responsible for inflammation of the stomach and intestines. A single drop of dirty water can contain more than 50 million bacteria. Drinking water with organic and inorganic pollutants can cause skin diseases, and damage to various organs such as liver damage, kidney failure, reduced fertility, carcinogens, reduced immune system, lung function destruction, and headaches. Drinking water mixed with heavy metals can cause loss of body enzymes, brain damage, bone loss, and paralysis. According to a study, more than 1400 people die every day in the world and about 80 in Bangladesh due to water pollution alone.

Number 6 of the 17 Sustainable Development Goals of the United Nations is about clean water, which calls for ensuring 100% of citizens by 2030. Addressing the global water crisis and achieving water, food and environmental security for sustainable development are formidable challenges. Even though the United Nations General Assembly has declared access to safe water as a fundamental right, 78.3 million people in the world are still deprived of this facility and this number is 2.6 million in Bangladesh. Especially in the capital Dhaka, citizens are deprived not only of clean water but also of adequate water supply. Many children are suffering from various diseases every year due to unsafe drinking water. According to UNICEF and the World Health Organization, two-thirds of people without access to safe water live in 10 countries, including China, India, Nigeria, Ethiopia, Indonesia, Tanzania, Pakistan, Kenya and Bangladesh.

Water scarcity is a global crisis. This crisis is spreading in different parts of the world due to various human activities and climate change. Most of the vast population deprived of access to safe water is extremely poor. The biggest victims are women and children. In 2035, the world's water demand will increase by 85 percent. If this situation continues, 500 million people in the world will face severe water shortages in the year 2050. The developed world is in fear of supplying such a huge demand. The United States, Canada, France and Australia may face water shortages for their energy production. More people die due to lack of clean water than the number of people who die due to various diseases in the world. The government's multifaceted activities are continuing to ensure clean water, and healthy adulterated safe food instead of adulterated, unsafe food and water. At the same time, technology and methods to keep soil, water and crops free from toxins need to be developed and properly applied.

International courts and local courts of various countries have recognized water as a fundamental human right. The United Nations General Assembly Resolution directed developing countries to cooperate in ensuring safe, clean, usable and affordable water and sanitation for all. Environmental degradation, globalization, population growth, rapid industrialization, urbanization, water pollution and waste are some of the causes of the water crisis. In addition, inadequate infrastructure and the forced migration or refugee crisis are also to blame for the fact that as the climate catastrophe worsens, the world's fresh water shortage will multiply. To ensure the desired sustainable development of the country, full attention should be given to establishing the right to clean water. Along with creating public awareness, law enforcement and administration should be linked with these initiatives. The government should formulate future development plans keeping in mind the commitment to protect the sources of clean water and provide clean water to the people. Sustainable use of water is necessary to keep the earth habitable and to leave a beautiful world for future generations.