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Water and Sanitation in the News

Partnering on a dry river bed

by Mike Nord

It's a global concern that has escalated into a fight for life with hundreds of millions affected all over the world. Water, the very life element, running through our fingers with not enough time to quench our thirst. Only 1% of our global water resources is safe for human consumption.

I would like to highlight some statistics before I embark on this article and show the harrowing facts of how close we are to this reality:

Globally, there are 780 million people living without clean drinking water and more than a third of the world's population lack access to safe drinking water. By 2050, five times as much land globally will be under extreme drought. We need to take steps to ensure this life resource isn't lost or ultimately we will be lost with it.

While water scarcity on its own is a scary thought, there is more to losing water resources, such as attendant food shortages, especially because the global population is growing at an alarming rate. Research shows that the global population will reach 9.6 billion by 2050. More demand for water will make it difficult for food production to keep up. Agriculture accounts globally for over 70% of fresh water usage. The spinoff of this could be social unrest, civil war, and political turmoil — all of this because of food shortages. Further future impacts include:

<u>Increased Global Conflict</u>: Freshwater resources are often shared by two or more countries which may lead to more international conflicts as freshwater becomes scarcer.

<u>Health Risks</u>: 5000 people die every day from water-borne diseases across the globe. The question is what this will be by 2050 if we don't take steps as citizens and stop taking for granted that local and international agencies are taking care of the problem. It is actually every one's responsibility to act and conserve water every day in our daily lives.

Economic Challenges: Water shortages also bring about economic hardships in many ways and disempower communities. It also has an effect on education because of the time it takes to collect water for so many people in in countries without adequate infrastructure and yes many time it's the children that do the fetching of water.

Energy Shortages are another major issue because creating energy requires large amounts of water. The water crisis in South Africa is also one of the most serious environmental threats we are facing.

These are some statistics taken from a World Water Day Report in 2017:

- Globally, over 80% of the wastewater generated by society flows back into the environment without treatment.
- The quantity of wastewater produced and its overall pollution load is increasing.
- Pollution from untreated wastewater has adverse effects on human health: 1.8 billion people use a source of drinking water contaminated with faeces. The combination of inadequate sanitation, poor hygiene, and unsafe drinking water is today still responsible for an estimated annual burden of 2 million diarrheal deaths.
- 663 million peoples still lack improved drinking water sources, and global demand for water is expected to increase by 50% by 2030.
- The opportunities from exploiting wastewater as a resource are enormous. Safely managed wastewater is an affordable and sustainable source of water, energy, nutrients and other recoverable materials.

South Africa must therefore invest in water infrastructure to ensure future growth economically as well as in health and food security if we are to sustain the rapidly growing population and urban development.

Areas where corporates and governments are working on or investigating are: Using groundwater, desalinating seawater, deducing water losses and reusing waste water.

This being said we also need to take responsibility to play a part in securing the future of water resource for our children and the generations to follow.

We need to take a serious looking at what we are contributing as citizens of this planet in our everyday activities to secure water and that being clean water availability now an in the future.

Below is data accurately calculated from the WAMTechnology <u>Water Calculator</u>, showing the amount of water it takes to produce some of the day to day products we use and consume.

This is calculated data of the amount in litres of water it takes to produce per unit of what we consume daily and what we don't see behind the sense in the production of these products.

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Yes, although many of us are doing everything we can daily to conserve water, there is still a lot of this valuable resource we are consuming daily in what looks like small amounts but isn't.

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While many of these products (e.g. certain foods and beverages) might have become integral parts of our diets and lifestyles, it is enlightening to discover how much water we could save from our global water footprint if we start cutting out some of the more wasteful products. When looking at the figures shown by this calculator, many people are blown away at their own ignorance at what they are actually consuming, while thinking they were saving by taking other basic water wise steps daily.

Yip food for thought.

Recently I attended the LoCs congress on climate change and sustainability. It was very encouraging and a great privilege to be in the company of global organizations working tirelessly to secure

and protect our water resource and ensure safety and growth of vulnerable communities that are affected.

There are many people across the world taking steps to protect our water on planet Earth from the man on the street to as I have just mentioned global organizations as we know.

How do we encourage others to be water wise?

Education is key to being water wise, you don't need a degree to encourage and be creative in spreading the message to those around you to conserve water. Be creative by looking at simple ways to conserve and applying them in your day to day activities.

The 3Rs of being water wise are:

Reduce your daily water use. It is easy to do;

Reuse water where possible. Most tap water can be used at least twice;

Repair leaking pipes, toilet cisterns and taps. Inspect your water metre and carry out a water audit to identify water that may be leaking without you knowing it.

WAMTechnology is working together with municipalities to implement user friendly and sustainable water asset management software and interim engineering capacities to ultimately benefit both municipalities and the communities supplied by these municipalities.

Water infrastructure in South Africa hasn't collapsed yet but is in a state of much needed repair and require daily effective management to provide quality service to communities.

We have many dedicated professionals in the water sector working to improve and sustain our water resource, however we need to join them by being proactive and asking ourselves how can we help now and be proactive in the current water crisis and to secure clean drinking water for the future generations to follow.

"Individual commitment to a group effort -- that is what makes a team work, a company work, a society work, a civilization work."
- Vince Lombardi

WAMTechnology has been providing water asset and operations management systems and associated services for the past 10 years. We assist in responsible water management and the use of our water operations system; thereby improving service delivery and water conservation.

The Municipal Assistant™ system provides many useful modules and tools (e.g. asset module, water demand module, staff and skills, suppliers, CRM, calculators, etc.) that helps to ensure that assets are correctly operated and maintained.

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