i Watch ..... *a citizen's movement for* *Transforming INDIA*

Wake up call for ***INDIA*** ..... *The only constant is* ***Change***

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Importance of Water

1. Preamble

From a Biological standpoint, water isn't important, *it's vital*. To put it simply, without water, there would be no living organisms on the planet. In looking at other planets in the universe, the first sign of possible life starts with water. No water = no life. We often hear about the dearth of water and how water is all important. Let's see actually why water is so important and what makes it so. To start with our planet, 70% of earth's surface is water; 75% of human body; and 90% of human blood is water too. Of all the water that's there on earth, 97% is in seas and oceans and 2% is icecaps. Of the remaining 1% fresh water, only a small percentage is accessible. And from what's accessible, 98% water is used for agriculture and industrial use. Maybe now water sounds important to us. Humans are basically a big aqueous solution of water and organic compounds. **Without consuming water for a week, we would die**.

2. Why RWH or Rain Water Harvesting must be done

In India most of the water is direct or indirect rain water. The monsoon fall is very definite, about 100 days per year. 50% of water falls in 35 days and the balance in 65 days. Hence Rain Water Harvesting is a must. This is a low technology solution and needs to be practiced in all the 9,000 municipalities and 630,000 villages of India. Presently we are depleting our ground water resources. **We need to recharge them during these 100 days of rainfall by RWH.**

3. Why it is important to supply sanitized water for drinking, cooking, bathing & swimming

Prevention is better than cure. Nearly 80% of diseases are water borne. Nearly 1,000 million people of India get unsafe drinking water. Bottled water is NOT the answer. It is about 2,000 times more expensive than community based sanitized water using "**Green Technology**" like electro-chlorination which only uses common salt and electricity as raw materials. One million litres of water requires only 10KW of electric power and 5 Kgs of common salt for sanitizing.

De Nora electro-chlorination systems have been developed for the difficult Indian conditions and especially for the local Indian communities in townships and villages. They are fully approved by WHO & the UN. Hundreds of units are already in operation from Kashmir to Kanyakumari. The smallest unit is **Solar Powered** for remote areas where there is no electricity and can sanitize 50,000 litres of water per day. The largest unit handles up to 288 million litres of water per day. *Operating costs are very low, about 0.10 to 0.01 np per litre.*

De Nora electro-chlorination systems can also be used for general **Sanitation** in Agriculture, Food Processing, Hospitals, Hotels, Commercial & Residential buildings.

4. Bio Technology for recycling waste water

Recycling waste water is extremely sustainable if managed in a decentralized fashion, since the source and user would be in close proximity. Transporting waste water to a remote unit for treatment and back to the user necessitates huge expenditure by way of pipelines, pumps, electricity and maintenance. The current style of recycling water is predominantly designed in this manner, and understandably, not producing much result. More importantly, inorganic treatment of primarily organic waste is destroying the organic wealth in sewage. It is vital to **deploy bio-technology for recycling waste**, and returning to nature what originated from her. Only then will it be possible to sustain the solution of the endemic problem of water shortage.

The **CSR Project Team** from *i Watch* has the expertise, knowledge and experience to assist and execute with operating teams to take up projects under items 2, 3 and 4.