

# THINKING BIG

VISION 2020 FOR SUSTAINABLE  
GROWTH OF WATER SECTOR

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# Effective Management of Resources

## Current Status of Water Availability and Use

India has 16 percent of the world's population, 2.5 percent of the land mass and 4 percent of the world's water resources. Water is fast becoming a scare resource. India's growing economy will translate into increased demand for water across different sectors. Various estimates and projections indicate an increasing trend in water demand for agriculture, industrial and domestic uses in the coming decades. Estimates reveal that by 2020, India's demand for water will exceed all sources of supply. In just 50 years a water-rich nation has been reduced to a water-insecure one. There is clearly an urgent need for action.

India is heavily dependent on ground water resources, which has led to extraction levels creating water shortages. These resources have also reached unhealthy contamination levels as a result of the pollution associated with the region's economic development and dependence on fossil fuels. As result, there is an increasing demand for water technology that can help improve the supply, distribution and quality of India's water.

Water use in Indian industry is very high due to a combination of factors including obsolete process technology, poor recycling and reuse practices and poor wastewater treatment. Water once used is generally thrown without any further use, even if the water is not much contaminated.

Segregation of wastewater from various processes into clean wastewater, (that can be reused) and contaminated water is not commonly done. The result is that even the uncontaminated water gets contaminated after mixing and is discharged as effluent.

The wastewater treatment system in Indian industry is essentially installed to meet the wastewater discharge norms. The design principles do not consider the possibility of recycling and reusing the wastewater. Inevitably, in all industries the wastewater discharged is seldom suitable for reuse within the industry, though industry expects other users to reuse its wastewater because it is 'treated'. Most industries have their water intake points upstream of their wastewater discharge points. This itself exemplifies the quality and interest of wastewater treatment by Indian industry.

### My company for me is..

Mother- an integral part of my life, which always tune-up a huge support for me and extend its valuable service to my country.

### Part of my job which I enjoy most..

Value Engineering and driving the business in strategic direction to realize all the objectives. Career other than mine I would love to pursue.. I love my career and I am proud of it and I never gave a thought of changing it.

### A job I would definitely never want..

Anything with routine work, I dislike monotony. To be more concrete: anything that involves less intellect doesn't excite me.

### The best thing about my company right now..

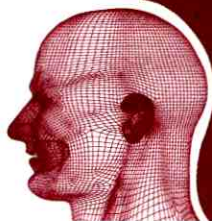
Our strong professional management and our workforces who support the proficiency in engineering and technology and let the company grow robustly across segments within the industry.

### The best thing about my company in 2020..

Realize our company's vision into reality with high professionalism and emerge as a world-class player in infrastructure industry.

### My role model in Water Industry..

Dr. Thomas C. Brown who has focused on methodology for economic valuation of natural resources; and the environmental, economic, and institutional aspects of water resource management.



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## **A company I admire most in 'Water Industry', other than mine..**

Singapore's NEWater. NEWater marked a new era in Singapore's water history. Produced using state-of-the-art membrane technologies involving microfiltration, reverse osmosis and ultraviolet disinfection, the result is an ultra-clean product that has been vetted by more than 30,000 scientific tests, surpassing even the World Health Organization standards for drinking water. Singapore has increasingly been looked upon by the international community as a role model for water management. The city-state, which has no natural aquifers or groundwater, has made tremendous progress from facing challenges in water supply to setting the standards in sustainable water management.

## **A company I admire most, in other industries..**

Apple Inc, Steve Jobs- Jobs' philosophy was to make products that were at the intersection of art and technology, intuitiveness and design. His openness to being inspired allowed him to live his philosophy, and in turn inspire others.

## **The toughest business decision I have made..**

Venturing into PPP (Public Private Partnership)

## **My favorite brand campaign in India..**

Amul- the Amul advertisement campaign has struck a chord with the population because of its wit, humor and choice of topics, be it politics, sports, Bollywood, lifestyle or just another happening of human interest. The idea resulted in some of the best advertisement hoardings where the topics as well as Amul's products found equal importance.

## **The latest corporate buzzword/catchphrase I like..**

Operation Future Bright- we're growing rapidly, together let's move towards a bright future.

## **5-Point Agenda of Vision 2020**

- 1. Solving the Water Problem:** The key to the problem lies in effective management of water resources. An integrated approach involving water treatment, source reduction, reuse of process water, effluent treatment, recycling of treated effluent and waste-minimization is urgently required.
- 2. Improve Process Technology:** Clean and advanced process technologies can help industry reduce its water demand. For instance, by replacing the conventional bleaching process with totally chlorine bleaching process, pulp and paper companies can almost close their water cycle. But they are costly.
- 3. Reuse Process Water:** This involves reusing water in a series, in an open system, for two or more successive but different purposes. This enables use of poor quality water for more than one purpose.
- 4. Re-circulate Process Water:** Indefinite reuse of same water after treatment for the same purpose. Makeup water is to be used only to replace unavoidable losses. This is far cheaper than installing new process technology and recent technological development has made sure that it can be used by any type of industry.
- 5. Rainwater Harvesting:** This helps industries meet a substantial part of their annual water requirement even as demand on local sources is minimized.

## **Initiatives that Need to be Taken**

Given the enormous challenges of urbanization and industrialization in Indian economy, the government will have to play a major role by empowering Urban Local Bodies (ULBs), both functionally and financially. Going forward, water sector is likely to see increased and efficient governance; a sharper focus on capacity creation, be it institutional or skill development; and an increased focus on reforms aimed at providing financial autonomy to ULBs and encouraging private sector participation. Stronger institutional mechanisms, such as resource regulation and tariff regulation of water as an increasingly scarce resource and a resultant regulatory emphasis on its sustainable use.

The twelfth five year plan period is for the water sector. The backlog of investments has not yet been overcome; the focus on service outcomes needs to be mainstreamed; and institutional reforms are urgently needed. If the recommendations of the High Powered Expert Committee (HPEC) report are adopted and if a New Improved Jawaharlal Nehru National Urban Renewal Mission (NIJNNURM) is launched, attempts to fulfill this agenda are likely to gain momentum. Though different technologies are available for facilitating cost-effective treatments, all that is needed is the investments, institutional reforms, cost recovery, public sector accountability, private sector involvement and emphasis on technology; efficiency and resource sustainability will be the themes that will drive the water sector agenda.

**for me...**

**LEADERSHIP**

Involves more than just leading people towards a common goal. One must be able to lead himself towards his mission. After taking care of the self, the rest will follow.

**LEARNING**

A focus on what inspires and motivates us, individually, to think and act outside the box and move beyond the familiar and into the unknown...to approach and face fear instead of avoid it.

**CHANGE**

To give a different position, course or direction.

**Required Leadership**

The facts are simple - water is an essential prerequisite of life, to sustain and improve our standard of living and our modern industrial economy - and we are not going to find a substitute for water. As the global water crisis intensifies, we face numerous and daunting political and economic challenges. The flip side of this coin represents virtually limitless opportunities for creative and innovative firms to help provide those needed solutions. Businesses will need to show leadership on the issue, finding ways to leverage their core

competencies, and to help shift water more firmly into the political and economic domains.

**Enabling Environment Needed for a Massive Investment/Growth in the Water Sector**

Due to the increasing scarcity of water, and the simultaneous realization of the same among the industrial and domestic sectors, commercial activities around the water industry have witnessed an unprecedented growth. Hence, there will be huge investments in design, technology and project management capability in the coming years. We foresee a large number of international companies entering India in the project, equipment and consulting sectors, thereby improving overall quality and capability levels. The sector is likely to create one-million jobs in the private sector in the next 3 years and all institutions, agencies, and companies involved in water management must be committed to transparency.

**I hope to spend my next holiday at..**

Himalayas

**I can't resist..**

A spiritual talk that make me realize about inner peace

**My favorite book/author..**

How the Mighty Fall: And Why Some Companies Never Give In by Jim Collins

**My favorite film and hobby as a teenager..**

Film: Sholay, Hobby: Cricket and I used to love the radio commentaries as a boy.

**Social issue I feel most strongly about..**

Subsidy- subsidies breed corruption. First, they divert resources to favored activities, industries, or people based on political objectives. Second, subsidies mask the relative price of different goods and services.

**Advice for EverythingAboutWater..**

Would like to suggest taking up a study towards conducting comprehensive within-industry sector-specific surveys for detailed risk assessments. This will help us develop risk models that can be useful at local scales and permit informed decision making.