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Thinking BIG vision 2020

12th ANNIVERSARY ISSUE

## 12th Anniversary Issue



EverythingAboutWater June 2012

# **SECTION 1**



India's water industry leaders write their views on "Vision 2020 for sustainable growth of water sector..."

Bringing Water Back to Life VA Tech WABAG Limited	Water - The Life Line for All Living Beings By Omprakash Shah, Managing Director, WaTech RO Systems (I) Pvt Ltd90
Need for Greater Efficiency  By Sushil Sethi, Managing Director, SPML Infra Limited	Time to Take Initiatives  By Mehul Panchal, CMD, Filter Concept Pvt Ltd
Effective Management of Resources By Y. R. Nagaraja, Managing Director, Ramky Infrastructure Ltd	Ensuring Clean Drinking Water  By Sunil Trivedi, Managing Director, Sarjan Watertech India Pvt Ltd98
Solutions for Better Living  By S. Ramachandran, Executive Vice President - Chemical & Water Group, Thermax Limited	Conservation for Future Generations  By Raj Kumar Kurra, Managing Director,  Eurotek Environmental Pvt Ltd
The India Story  By V. Madhusudan, GM - Water and Wastewater Segment Schneider Electric, Mumbai	Making Every Project a Role Model  By Mahesh Deshmukh, Managing Director, Chetas Control Systems Private Limited
The Freedom of Water  By Ashit Dhirajlal Doshi, Managing Director,  DOSHION Private Limited	Appropriate Technologies & Private Participation  By Mathew Sebastian, CEO,  Living Waterefine Technologies Pvt Ltd
Emergence as a Low Cost Manufacturing Hub  By Sajiv Nath, Managing Director, Endress+Hauser (India) Pvt Ltd68	Sustainability on All Fronts  By Raj Kapoor, Country Manager, Indian Sub-continent, Hydranautics (A Nitto Denko Company)
Energy Saving through Water Management By Nishit Doshi, Managing Director, Fivebro International Pvt Ltd72  Shift towards Green Solutions	Growing Trends in Indian Water Industry  By P. Devanand, Director - Technical & Business Development, Chempure Technologies Pvt Ltd
Need to Incorporate Social Considerations  By Hemant Dandekar, Pure N Cure Technology	Yes! Water is life.  By Dinesh Jain, Chairman and Managing Director,  Dowac Systems & Projects India Private Limited
It's Never Too Late! By Vijay S. Shah, CEO & MD, Hi-Tech Sweet Water Technologies Pvt Ltd	Water Sector: The Current Scenario  By Cyril Gubbi, Director Technical, G.E.T. Water Solutions Pvt Ltd

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**Sushil Sethi Managing Director SPML Infra Limited** New Delhi



# **Need for Greater** Efficiency

Water is the most important requirement for the human life. Fresh water is available only 2.7% though the surface of earth is geographically covered more than 70% with water. India had large freshwater reserves, but the increasing population and over-exploitation of surface and groundwater has resulted in water scarcity. With such vast geographical spread, India's water demand and corresponding market is among the largest in the world, with approximately one-third of the total estimated value dedicated for water provisioning, one-third for municipal water treatment and one-third for industrial water treatment. The overall annual growth rate Indian water market is 15 to 20 per cent, with the drinking-water and industrial segments growing even more rapidly.

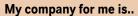
### **Demand for Water**

Water - the natural resource with no substitute- continues to escalate at unsustainable rates, driven by population growth and industrial expansion. The resources remain constant in terms of quantity whereas the quality is being systematically worsened as a result of human activities and their effects. The demand for water is subject to three driving forces; rapid increase in population, improvement in quality of life, and climatic change that lead to an increase in extreme events both in frequency and magnitude.

India today has the largest agricultural network in the world and also the largest user of water and accounts for about 70 per cent of the total freshwater abstraction. The industry accounts for 22 per cent of the freshwater consumption and remaining 8 per cent is used by the households. More than 73 per cent of wastewater is released without any kind of treatment, thereby polluting the usable water supply. India's urban water demand is expected to double, and its industrial demand to triple, by 2020.

### **Sinking Water Table**

The per capita availability of fresh water in India was 5177 cubic meter in 1951, which has reduced to 1820 cubic meter in 2001. It is predicted that by 2025, per capita annual average fresh water availability will be only 1340 cubic meter approximately. A latest Central Groundwater Board (CGB) study across the country has a depressing result on the availability of groundwater in the country. Many water bodies and river basins are being exploited beyond



To us at SPML, success is a measure of promises kept. It is the single most cherished dream in every project that we have decided to undertake. Commitment to the cause is what has driven us in the last three decades. And commitment is the key in times ahead.

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

I like planning for future development and meeting new people. The possibilities are endless.

### Career other than mine I would love to pursue..

I am passionate about water and I have had no chance to think anything else in the last thirty years.

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

Work without challenges.

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

SPML is a forward looking and future oriented company and today attracts some of the most energetic minds in Indian water sector to our company.

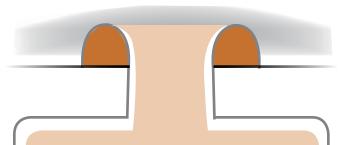
### The best thing about my company in 2020..

By 2020, SPML would have built large platform with requisite strength and capacity to take larger roles in sustaining India as one of the most admired country in the world.

### My role model in Water Industry..

I am very impressed with the ideas and plans of Shri Kamal Nath Ji, Hon'ble Minister of Urban Development to improve water infrastructure in our country.





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

I like the work that Veolia has done to improve drinking water services in Mexico and Germany. The water culture developed by them has encouraged people for better management of precious natural resources.

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

I admire Tata. I like the way Tata has shown the management skills and developed to this time, especially the turnaround of heavily loss making Jaguar and Land Rover.

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

When we started more than three decades ago, integrated water management was an unheard business proposal. Since we were passionate about it, we made a decision to promote water sustainability and to develop better water infrastructure for country.

### My favorite brand campaign in India..

The Amul campaign has been telling stories of India and captivating Indians of all ages. The key character is the little girl in polka dots, who literally helped Amul butter win over an entire nation.

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

'No Guts, No Glory'

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

I like the serene environment surrounded by beautiful woods and beaches of Mauritius.

### I can't resist...

Execution of a good idea

### My favorite book/author...

Future Shock by Alvin Toffler - which analyses the effects of rapid industrial and technological changes upon the individual, family, and society.

its capacity and several of them are considered to be water scarce. Over 80 per cent of the domestic water supply in India is dependent on groundwater. However, groundwater is fast depleting. Water tables have fallen significantly in most areas. The situation is getting worse in Delhi to meet the water demand of its growing population as its groundwater reserves are depleting fast. In Delhi alone, the ground water that was available at 20 feet deep in 1977 has depleted to 201 feet by 2010 and there is a significant pollution of groundwater from natural as well as manmade sources.

### **Treatment of Wastewater**

In the last one decade, one third of India's population has become urban. The level of urbanization has increased from 27.81% in 2001 to 31.16% in 2011, a drastic shift. It is expected that the India's urban population by 2020 will reach 465 million from the existing 340 million. The growth of the Indian economy has also increased water usage across sectors. As a result, wastewater is increasing significantly and the facilities to treat wastewater are not adequate in urban as well as rural areas in India. Presently, only about 27 per cent of the generated wastewater is treated; the rest is discharged into ground and water bodies without any treatment. There is an urgent need for better infrastructure and organization with regard to wastewater management. Most of the existing facilities are conventional and not effective in terms of technologies that are being used as per modern standards.

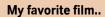
With over three decades of experience, SPML has gained a strong foothold in the domain of design and construction of wastewater treatment plants and have contributed immensely. SPML provides solutions for proper treatment and disposal of municipal and industrial wastewater and sewage to ensure that the generated wastewater does not harm our delicate ecosystem and is recycled for further usage.

Some of the signature wastewater treatment plants constructed and maintained by SPML:

- >> 240 MLD Sewage Treatment Plant, Ahmedabad, Gujarat
- >> 72 MLD Sewage Treatment Plant, Okhla, Delhi
- >> 70 MLD Sewage Treatment Plant, Nasik, Maharashtra
- ▶ 60 MLD Sewage Treatment Plant, Mysore, Karnataka
- ▶ 42 MLD Sewage Treatment Plant, Kanpur, Uttar Pradesh
- ▶ 10 MLD Tertiary Treatment Plant, Bangalore, Karnataka
- ▶ 35, 24 and 21.6 MLD Effluent Treatment Plants in Delhi

### **Way Forward**

Certain practices, if implemented efficiently, can definitely make a difference. In a developing country like India, pushing for greater efficiency in rain-fed agriculture is a cost-effective way to conserve water, produce more food, and reduce poverty. Low-cost practices like water harvesting and storage,



I liked the film '3 Idiots' for its simplicity and message

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

The deteriorating water situation deserves more attention than ever. Water is the prime resource essential for survival of human life on the earth.

### Advice for EverythingAboutWater...

It is a good publication of water sector. You should promote water sustainability in a bigger way and make people aware about the dire need of proper water management in India.

using hardier crops, and planting seeds without plowing to facilitate better moisture retention would enable crops to survive short periods of drought. By taking these and other appropriate actions now, we could slow water demand by as much as 30 percent in the next 10 years.

We need to bring in efficiencies at the production, transmission and distribution levels by adoption of efficient technologies and reducing the Non-Revenue Water (the "NRW") through metering and efficient good distribution networks. The utilities also need to adopt asset management programs to achieve reduction in operation and management costs through economies of scale. The practice of awarding management contracts to improve service levels will help in reducing wastage of water. We need to install water conservation devices both at the industrial and residential levels like we are encouraging the use of CFLs in the power sector.

India would benefit from establishing an independent central regulatory agency to design, control and coordinate national programs for water management and conservation. Some of the measures if taken properly would ensure that water management techniques and initiatives are executed at a national level across sectors:

- >> Improve water usage efficiency in the production of water-intensive crops such as rice, wheat and sugarcane; adopt new techniques such as rain-water harvesting and watershed management in agriculture
- >> Encourage investment in recycling and treatment of industrial wastewater through regulations and subsidies for water treatment plants

- ▶ Implement policies to make rain-water harvesting mandatory in cities with new construction projects, and
- >> Promote effective Public Private Partnership (PPP) model in building - augmenting Water Infrastructure Assets and in the management of water supply systems
- >> Promote efficient water use and pay practices through mass media campaigns and community based awareness and education programs

Complete source-to-tap safe water would be a reality once we address the creation of world class infrastructure and efficient management of storage, treatment and distribution of water. Proper treatment and efficient management of water supply distribution network; provision of service connection; efficient operation & maintenance of water supply system; optimum utilization of energy to minimize the cost of operation of treatment and distribution of water supply are some of the measures. In addition to this, reasonable costs and improved service levels will be of great help in this area through management contracts although the ownership of the assets should be left in the hands of the government as water is a sensitive subject.



