



Newsletter:

Issue 11: June, 2014

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## Message from Chairperson

I am happy to share with you the eleventh issue of FICCI Water Mission E-Newsletter. This newsletter gives you an update on the Mission's work and developments in the water sector.



We, at FICCI, take this opportunity to extend

our heartiest congratulations to Sushri Uma Bharti for assuming the responsibility as Union Minister for Water Resources, River Development and Ganga Rejuvenation. We are confident that the Ministry of Water Resources will make significant advances in water management under her guidance and leadership. We offer the ministry our fullest cooperation at all times.

The last month saw the formation of three task force viz. Water Efficiency, Private Sector Participation in Water and Water Stewardship. The first meeting of the task force – Water Stewardship was organised on May 30 at IFC Delhi office to identify the key potential focus areas and the work development plan of the task force.

The newsletter contains an update of major news items relating to water sector, update on new technology, major news items pertaining to sector, important sectoral reports and information on upcoming programme on water. We hope that you would find the newsletter useful. The secretariat looks forward to your comments and suggestions.

**Anita Marangoly George**

**Chairperson, FICCI Water Mission and  
Director-Infrastructure and Natural Resources  
IFC, World Bank Group**

## Message from Co-Chairperson



I am glad to see the willingness of industries to come forward and work for water efficiency and conservation as part of FICCI water Mission. The Mission is serving as a platform to bring together all stakeholders and work jointly towards achieving water stewardship. The eleventh issue of FICCI Water Mission e-Newsletter will give you an update on the Mission's work and developments in the water sector at large.

The new nomenclature of the Water Ministry — Water Resources, River Development and Ganga Rejuvenation signals Mr. Modi government's priority to water and river development. FICCI Water Mission, in its first Water Stewardship task force meeting on May 30, took up River Ganga rejuvenation as a potential area of focus to work on in addition to awareness building, knowledge development, sectoral water stewardship and policy advocacy.

I look forward to your support so that we are able to take a lead on water issues, forge new partnerships and engage various stakeholders to deliver on our commitments.

**Sanjiv Lal**  
**Co-Chairperson, FICCI Water Mission and**  
**Vice President-Corporate Projects**  
**Tata Chemicals Limited**

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## Water Mission Activities

### Water Stewardship Task Force Meeting

The first meeting of the Water Stewardship task force was organised on May 30, 2014. In addition to the task force members, we saw the participation of WWF-India and Council on Energy, Environment and Water (CEEW) as presenters/ observers.

In the meeting, WWF-India presented - 'Rivers for Life, Life for Rivers' programme as an example of a large-scale initiative for river rejuvenation and suggested that FICCI Water Mission can potentially support a similar platform for alignment of various FICCI members within the Ganges basin. Awareness building, knowledge development, sector wise actions (sugar, steel, power,

beverages, pulp & paper etc), public-private-community dialogues and policy advocacy are some of the potential focus areas which were identified in the meeting and it was decided to map the task force activities according to timeline as short-term (5-6 months), medium-term (6 months – 1.5 years) and long-term (> 1.5 years) for successful achievement.

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## Update on Technology

### Quantum leap for manufacturers in treating wastewater

For many manufacturing and processing plants around the world, there is increasing pressure from government agencies to reach higher standards of wastewater treatment for environmental discharge. In fact, food, beverage, distillery, textile, cannery, dairy and tannery plants are all facing similar challenges.

A large fruit juice processor in Australia was facing this issue. Government authorities were set to significantly increase its discharge fees, unless the company could reduce its Biochemical Oxygen Demand (BOD) effluent levels from around 2500-4000 to below 600 and preferably below 300 for flexible discharge to sewer.

Enter BioGill, an innovative, Australian-invented technology that uses microorganisms, bacteria and fungi, in a unique above-ground bioreactor to successfully treat wastewater.



*The ceramic gills with air spacers provide the perfect oxygen/liquid interface for microorganisms to flourish.*

According to BioGill Chief Executive Officer, John West, the BioGill technology is truly ground breaking and radically different from conventional bioreactors because the gills are not submerged. Instead the “gills”, composed of Nano-Ceramic Membranes™ arranged vertically in loops, are suspended in the air, above ground, with wastewater gravity fed over and down the gills.

“Fungi and bacteria, known as biomass, grow on the membranes in direct contact with the air, eating nutrients much faster than other systems. The high levels of oxygen available means nutrients are removed very rapidly. Old biomass peels off the membranes and is replaced by new, healthy cells, so the system doesn’t foul and is constantly self-renewing,” explained Mr West. “The



result of this approach is a treating biomass of 10 to 15 times of conventional biological wastewater treatment systems,” he added.

Forty-eight BioGill bioreactors were installed at this fruit processing plant, in three treatment bay areas. Wastewater passes from the factory processing area through solids filtration into buffer tanks, then transferred to one of three treatment tanks. The wastewater is then pumped to the top of the gills and dispersed by gravity across the bioreactors. Wastewater is circulated over the BioGills for 24 hours. Following the BioGill treatment process, the wastewater is pH adjusted prior to discharge. The results have been very impressive. Over a 24 hour period, BOD reduction of 2,500 mg/l is being achieved.



At Mantaray Island Resort in Fiji, a BioGill system is treating 14,000 litres of wastewater each day from the kitchen, laundry, showers and composting toilets.

Independent testing from The National Water Quality Laboratory Suva has reported impressive results. High-load sewage, rich in oils from a commercial kitchen with an average BOD of 662 mg/L was reduced to an average BOD of 25 mg/L (96% removal efficiency).

The total nitrogen was reduced on average from 112 mg/L to only 24 mg/L (79% efficiency) in a simple to operate and inexpensive system which also generates reuse water for the resort’s gardens.

BioGill systems, treating sewage and industrial wastewater, are now operating in Australia, Canada, Mexico, Vietnam and the Philippines, as well as Fiji and recording excellent treatment results. With the company recently appointing its first local agents and distributors, BioGills are now available in India.

“For the wastewater market in India, our compelling advantage is that we deliver a very cost competitive solution, given the minimal maintenance, low energy consumption and reduced operating costs of running a BioGill system,” added Mr West.

To find out more, please email [info@biogill.com](mailto:info@biogill.com) or visit [biogill.com](http://biogill.com)

### **Clean Yamuna not a pipe dream anymore**

After almost two decades and spending Rs 1,500 crore on cleaning the polluted Yamuna River, the project is still at a dead-end. In its recommendations to Lieutenant-Governor, the committee has suggested some short-term measures, including setting up more STPs/ETPs, installing of online monitoring systems and CCTV cameras over river Yamuna. The recommendations also include construction of boundary walls/wire meshes along the drains, increase the number of dhalaos (embankments) so that solid waste is not dumped in drains.

<http://www.dailypioneer.com/city/clean-yamuna-not-a-pipe-dream-anymore.html>

### **Lieutenant governor Najeeb Jung set to bring Gujarat model to Delhi**

Following a 50-minute meeting with PM Narendra Modi on May 28, Delhi's lieutenant governor Najeeb Jung has decided to implement the 'Gujarat model' of governance in the Capital. Three big-ticket projects here involving cleaning and development of the Yamuna, solar power generation, and installation of more CCTV cameras will draw from Gujarat's best practices.

<http://www.hindustantimes.com/india-news/jung-set-to-bring-gujarat-model-to-delhi/article1-1226116.aspx>

### **Clean Ganga plan to see the light of day?**

According to the estimates of National Ganga River Basin Authority (NGRBA) as against the release of 3,000 million litres of sewerage into the river water daily, only 1,000 million litres sewerage is treated. Experts further pointed out that both the flow and quantity of the river has reduced due to large number of dams in the upper stream of the river in Uttarakhand. Minister for Water Resources Uma Bharti has been given a dedicated portfolio of Ganga Rejuvenation by Modi. According to sources, NGRBA, which is presently under MoEF, is likely to be transferred to Water Resources Ministry. Uma Bharti has sought the data and files in this regard from NGRBA. The five Ministries viz — Water Resources, Environment, Shipping, Tourism and Power will work in coordination to fulfil Modi's commitment to rejuvenate the river

<http://www.dailypioneer.com/nation/clean-ganga-plan-to-see-the-light-of-day.html>

### **Rs 1474-cr World Bank water supply project in State**

Assam is one of the four States of the country where tapped water supply schemes could cover less than 10 per cent of the population, and considering the problem, the World Bank is

supporting a mega water supply and sanitation project in the State, which would cover seven districts. The total outlay for the Rural Water Supply and Sanitation project for low income group people will be Rs 1,474 crore and the World Bank is supporting the project with International Development Association credit of Rs 737 crore. The remaining fund would be given by the Central and State governments. The credit for the State government would be provided for a period of 25 years with a grace period of 5 years.

<http://www.assamtribune.com/scripts/detailsnew.asp?id=jun1314/at06>

#### **New schemes on skill development, irrigation likely in Budget**

The Budget for 2014-15 is likely to announce four new centrally sponsored schemes — on skill development, irrigation, cleanliness and Ganga rejuvenation. For the existing schemes, the Budget is not going to extend any additional allocations. The Modi Government aims to provide irrigation facility to each farm land and a scheme is expected to be announced in the Budget. This would not only create irrigation facility but also increase their utilisation.

<http://www.thehindubusinessline.com/economy/new-schemes-on-skill-development-irrigation-likely-in-budget/article6108121.ece>

#### **Delhi: Draw water from ATMs for 30 paise under DJB's new initiative**

Soon residents of the resettlement colonies in the national capital would be able to draw water from water-ATMs paying a token amount of 30 paise under a new initiative by the Delhi Jal Board (DJB). The DJB, in collaboration with the Delhi Urban Shelter Improvement Board (DUSIB), recently launched a pilot project at Savda Ghevra, a resettlement colony in Southwest Delhi. As a part of the project, a decentralised water treatment plant has been installed to extract the ground water which then is purified through reverse osmosis system and then provided to the people through 15 water-ATM kiosks.

<http://ibnlive.in.com/news/delhi-draw-water-from-atms-for-30-paise-under-djbs-new-initiative/471570-3-244.html>

#### **10 crore litres of clean water going down the drain every day**

As Delhiites go through water shortage this summer, 10 crore litres of clean water from the Yamuna via the Haiderpur canal is flowing into the Najafgarh drain at Wazirpur in North Delhi each day. This raw water being put in the drain is enough to supply about 10 litres of drinking water to every Delhiite daily. The Delhi Jal Board's Haiderpur water treatment plant has the capacity to treat 220 million gallons per day (MGD), so the rest of the raw supply from Haryana is allowed to go into the Najafgarh drain, a stormwater channel that has become like a sewer.

<http://www.thehindu.com/todays-paper/tp-national/10-crore-litres-of-clean-water-going-down-the-drain-every-day/article5991296.ece>

### **Water reservoir levels falling to all-time low'**

India's key reservoirs are plunging to an all-time low. The Central Water Commission (CWC), which monitors the status of 85 of the main reservoirs in the country, including the Bhakra Nangal, Almatti and Nagarjuna Sagar dams and the Hardeo Barrage, has warned that "live" storage in these dams has dipped to below 33 per cent of its total capacity as on May 1, 2014. India has around 5,000 reservoirs but the remaining reservoirs are monitored by state governments.

<http://www.asianage.com/india/water-reservoir-levels-falling-all-time-low-155>

### **Delhi LG orders closure of polluting industrial bodies**

Lieutenant Governor (LG) of Delhi Najeeb Jung directed Delhi Pollution Control Committee (DPCC) to ensure closure of polluting units in the city and instructed concerned commissioners to demonstrate compliance with DPCC orders. The LG has also constituted a high level committee under the chief secretary of Delhi to suggest short and long terms measures to control air pollution and rising pollution in the Yamuna River.

<http://www.millenniumpost.in/NewsContent.aspx?NID=58176>

## **Upcoming FICCI Water Mission Events**

**FICCI-OECD-ADB-WRG 2013 Joint seminar on Water Risk and Stewardship - New Delhi, India, August 20-21, 2014.**

To contribute to positive action on India's agenda of water policy reform, the Organisation for Economic Co-operation and Development (OECD), the Federation of Indian Chambers of Commerce and Industry (FICCI), the Asian Development Bank (ADB), and the 2030 Water Resources Group (WRG) are collaborating to organise a joint seminar on Water Risks and Stewardship in India. The objectives of the seminar are 3-fold:

- Build a common understanding of water risks and risk sharing to promote practical efforts to manage water risks and improve stewardship;

- Provide a platform for policy dialogue by convening various stakeholders (industry, development co-operation agencies, government officials from state and national levels, and NGOs); and
- Draw out lessons learned from water stewardship approaches and recent experience with policy reforms to support the exchange of good practice.

The seminar could potentially serve as a platform for further collaborative engagement.

For more information, please visit: <http://ficci.com/events-page.asp?evid=21965>

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## **Sector Report – Water Stewardship: Perspective on business risks and responses to water challenges**

This report, developed by WWF, cited that business engagement with water management is at a critical juncture. Business faces, or will soon face, risks from water that could have a profound impact on profitability and brand value. The report also defined water risk in three basic categories – Physical risk, Regulatory risk and Reputational risk.

The report explained Water Stewardship Steps that help define WWF's concept of water stewardship. The steps were designed to better understand the various water related activities that companies can engage in. The steps include: (1) Water Awareness (2) Knowledge of impact (3) Internal action (4) Collective action (5) Influence governance

For more information, please visit:

[http://awsassets.panda.org/downloads/ws\\_briefing\\_booklet\\_lr\\_spreads.pdf](http://awsassets.panda.org/downloads/ws_briefing_booklet_lr_spreads.pdf)

**Comments/ queries can be address to –**

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