

## **BCCI Environment & Energy Conclave: 31 August 2012**

[Mr Jha, Mr Rao, Mr Bhadury, Dr Narain, Mr Sukhdev, Mr Jensen, Mr Mukherjee, ladies and gentlemen, good morning.]

My thanks to Bengal Chamber of Commerce and Industry for inviting me to attend the Water Forum. I congratulate them for organising this seminar, which is timely, with not only India, but the world, considering water scarcity.

Earlier this week, the Stockholm International Water Institute published a report which warned that the world's population may have to switch almost completely to a vegetarian diet over the next 40 years to avoid catastrophic food shortages. Humans derive about 20% of their protein from animal-based products now, but this may need to drop to just 5%. The report states "there will not be enough water available on current croplands to produce food for the expected nine billion population in 2050 if we follow current trends and changes towards diets common in western nations".

These dire warnings of water scarcity limiting food production come as the UN prepares for a possible second global food crisis in five years, with prices for staples such as corn and wheat having risen by nearly 50% on international markets since June, triggered by severe droughts in the US, Russia, and weak monsoon rains in Asia, including here in India. Some of you will remember that food shortages in 2008 led to civil unrest in 28 countries.

We used to think of water as free, falling from the sky in abundance. When the word water appears in print these days, crisis is rarely far behind. Water, it is said, is the new oil: a resource long squandered; now growing expensive and soon to be overwhelmed by insatiable demand. Climate change threatens to make the problems worse.

Climate change projections tell us that extreme weather is likely to become more common. This situation is more acute in a country like India, which is one of the fastest growing economies in the world, and brings with it issues such as increasing urbanisation and severe pressure on infrastructure and water.

In coming years water is expected to grow more scarce. Bringing supply and demand into equilibrium will be painful, and political disputes may increase in number and intensify in their capacity to cause trouble. Access to affordable and safe drinking water and adequate waste water services are goals common to all countries. But around 2.4 billion people globally lack access to sanitation, while 1.1 billion lack access to safe drinking water. Many countries have yet to develop an integrated, sustainable approach to water resource management. If this trend continues 2 out of 3 people will live in water-stressed conditions by 2025.

I therefore hope that the UK and India can work together to address the issue of water scarcity and look at sustainable solutions.

Drawing on 30 years' experience of developing integrated water resource management techniques, the UK water sector now boasts an industry which is a world leader. The industry, which comprises over 500 companies and employs around 80,000 people, has successfully delivered drinking water quality which is the highest it has ever been, river water quality that has improved dramatically and coastal bathing water quality that has improved year on year.

Privatisation of the water sector in the UK has been a success. There has been £ 90 billion of investment to reduce the industry's impact on nature and to continue to deliver high quality drinking water, while keeping water bills affordable. In fact, the water industry is arguably the most successful of all the 1980s privatisations.

In the UK:

- Almost all (over 99%) of the UK population is served by the public water supply. Maintaining supply without damaging the environment was one of the greatest challenges for the industry, which it has addressed.
- In the UK, 408,500 kilometres of pipes are used to supply water to customers, and 373,282 kilometres of sewers return it for treatment.

- In England and Wales, approximately 19 billion litres of water per day is provided from 2,100 licensed surface and groundwater abstractions. Over half of this (an average of 150 litres per head per day) is consumed by households.
- The water industry is energy-intensive. In the UK, industry has recognised the impact of its activities and the need to quantify, manage and reduce carbon emissions, and has proactively undertaken collaborative work to develop industry tools to measure and therefore manage both operational and embodied carbon. Water is also one of the first sectors in the UK to explicitly include carbon in business planning.

The UK is at the forefront of the global water sector, embracing a wide range of companies from large professional utilities to the manufacturing and service firms that support them. Expertise is in a wide range of areas such as water purification, wastewater management, industrial effluent management, water recycling and recharging and water supply, and the focus is on continuous innovation to provide technology which offers better efficiency, a smaller carbon footprint and at a lower cost.

Particularly highly regarded around the world is the UK's expertise in designing regulatory and financial frameworks, which can operate to the highest levels of environmental protection, quality maintenance, customer protection and making water networks sustainable. It also has considerable experience of working in partnership with Government.

From an Indian perspective, some key areas where UK can work closely with Indian companies and authorities include:

- Technology and products to reduce unaccounted-for-water and non-revenue water;
- Wastewater technology to remove industrial pollutants, for example heavy metals;

- Water Conservation and Recycling Technology such as Rainwater Harvesting and Desalination
- Consultancy and expertise to upgrade existing water supply networks and put in new networks; and
- Assistance in designing regulatory and financial frameworks, which will enable the networks to be sustainable;

UK companies involved with the water sector such as utilities, contractors, consultants, equipment manufacturers, lawyers and financiers, have a reputation of working successfully in world markets and between them generate over £3bn of business annually overseas. They will continue to seek opportunities abroad and are keen to play their part to help meet the UN's Sustainable Development Targets for water.

And quite a few of these companies are already active in India. While a few are scouting for opportunities to run water networks, the others are providing state-of-the-art products & services in areas such as flow monitoring, effluent treatment, water management, arsenic mitigation, sewerage rehabilitation and consultancy.

The UK and India are also working together on R&D in areas like Changing Water Cycle, Arsenic Mitigation, Water Management, Oceanography and Climate Modelling for Water Resources.

In South Asia, The British Government, through DFID is involved in The South Asia Water Governance Programme (SAWGP), a five year programme which aims to improve trans-boundary water governance and deliver sustainable, fair and inclusive development and climate resilience in the Brahmaputra, Indus and Ganges river basins. The programme will focus on promoting regional cooperation and engaging a wide range of stakeholders more actively in decision making processes at regional, basin, national and local level. The programme will run from 2012-2017, building on the successful South Asia Water Governance Initiative (SAWI, 2007-2011). Australia (AusAID), Norway (MFA), the World Bank (WB) and the International Centre for Integrated Mountain Development (ICIMOD) will partner DFID in delivering the programme.

Nor is the UK resting on its laurels. We have realised that water supplies are already under stress in some parts of our country. Because of pollution and over-abstraction only a quarter of our rivers and lakes are fully functioning ecosystems. In the coming years, the combined effects of climate change and a growing population are likely to put increasing pressure on our rivers, lakes and aquifers.

In December last year, the British government published a White Paper called “**Water for Life**”. This White Paper describes a vision for future water management in which the water sector is resilient, in which water companies are more efficient and customer focussed and in which water is valued as the precious resource it is. The White Paper is our call to action for tackling water pollution and over-extraction; to make the water sector more customer focussed and support growth and innovation; and to change the way we use and value water.

Underlying all this is a need to change attitudes and behaviour more widely. Water is a valuable resource – an essential of life. Abstracting it can damage the local environment. Delivery and treating it uses energy. We need to build understanding to help people the world over to value water more and use it more efficiently. It is not only the direct water we use from taps that we should think about, but the water embedded in products we use.

Each Briton uses about 150 litres of tap water a day, but if you include the amount of water embedded within products our water consumption is around 3400 litres every day! About 65 percent of the water that we consume is in our food. 140 litres of water are used to produce every cup of coffee we drink and 18,000 litres of water in manufacturing every pair of jeans we buy.

I hope that by working together, we can share each other’s experience, creativity and expertise that will benefit the water sector – and ultimately and most importantly the people - in India and the UK.

Thank you.