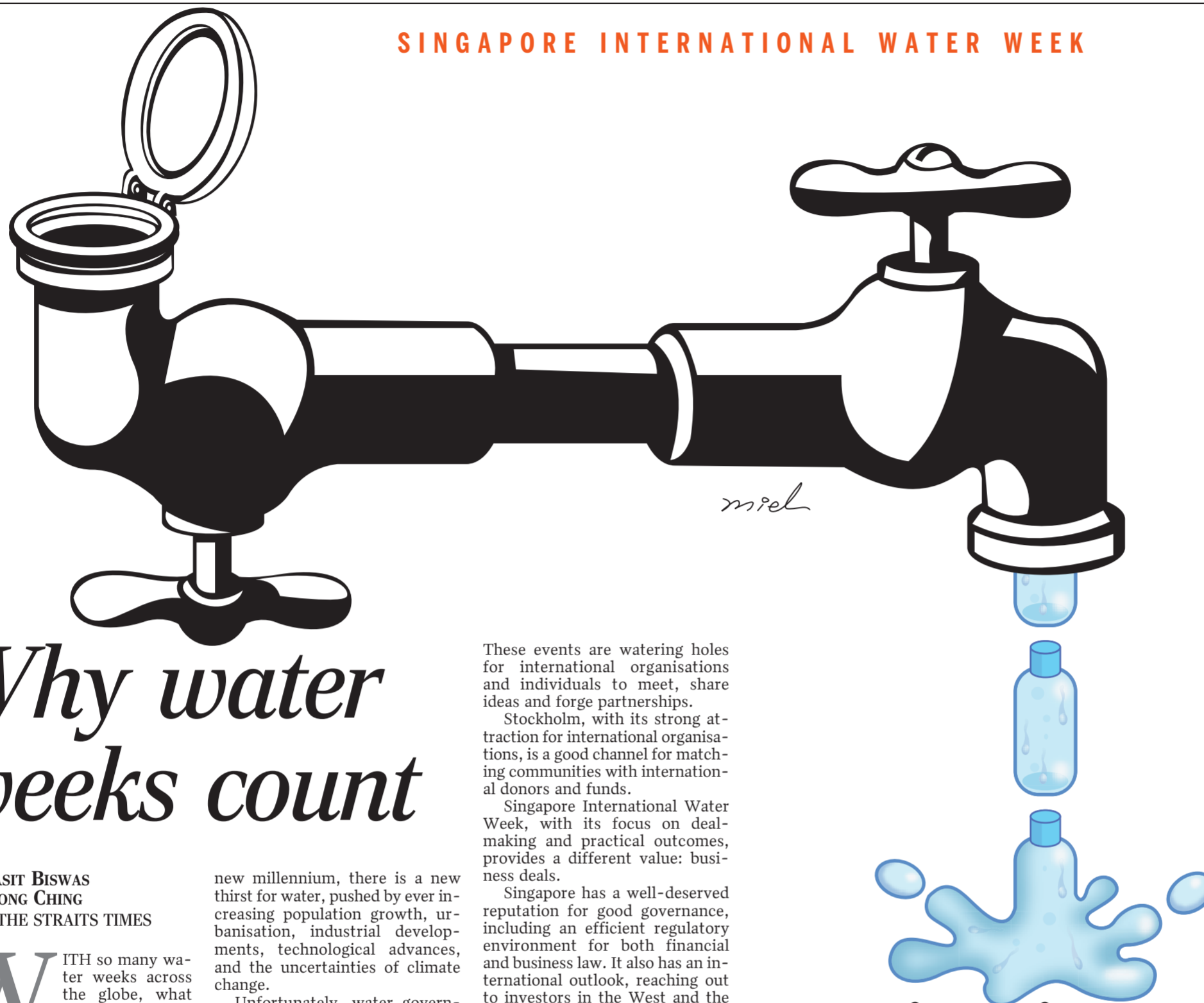


SINGAPORE INTERNATIONAL WATER WEEK



Why water weeks count

BY ASIT BISWAS & LEONG CHING FOR THE STRAITS TIMES

WITH so many water weeks across the globe, what can the Singapore International Water Week starting today offer?

Before Singapore, there was Stockholm. After, there is Berlin, Milwaukee, Tel Aviv, Amsterdam and Toronto. Is there a need for so many water weeks in different cities of the world?

The short answer is yes, provided they can find their respective niches and make positive contributions.

Stockholm, the leading organiser of the event now into its 21st year, tends to be somewhat academic with a focus on international institutions. Singapore has established itself as a business-oriented "one-stop shopping centre" for water technologies, while Berlin is making a determined attempt to be multi-sectoral in terms of water for all purposes, including food, energy and environment.

Stockholm claims to provide cutting-edge knowledge while Singapore aims to be a thought leader. But there are subtle differences. Stockholm deals in all aspects of water, whereas Singapore focuses almost exclusively on urban water and wastewater management.

The Stockholm Water Prize is given to eminent people working on all aspects of water issues and is generally accepted as the "Nobel Prize" in the area of water. In contrast, the Lee Kuan Yew Water Prize has a much narrower focus: Over the past four years, it has been awarded for research in urban wastewater management three out of four times.

There is room for both broad and focused approaches. In the

new millennium, there is a new thirst for water, pushed by ever-increasing population growth, urbanisation, industrial developments, technological advances, and the uncertainties of climate change.

Unfortunately, water governance in nearly all countries of the world in the past has been poor and looks likely to remain so. Yet, unless governance improves significantly, it is unlikely that the water problems of the world can be resolved.

Population growth, higher urbanisation and higher standards are important drivers for increasingly higher demand for water. Estimates are varied but all sound a clarion call for the need to deal with burgeoning populations in cities. In 2008, for the first time in human history, more people lived in cities than in rural areas. This means more attention needs to be paid to basic infrastructure and such unglamorous things as pipes and plumbing, which people take for granted and seldom deliver votes for politicians.

Before 2000, the oft-cited figure is that one billion people do not have access to safe drinking water and 2.4 billion lack access to good sanitation. A decade on, many people realise such figures are meaningless since they have no link to the quality of water.

The Third World Centre for Water Management estimates that at least 1.8 billion people do not have access to clean water that can be drunk without any adverse health effects. The centre also estimates that only about 10 per cent of people in Latin America have access to good wastewater treatment, with a similar situation in Asia's developing countries and somewhat worse in Africa. Consequently, many rivers in cities have become urban sewers. This is where international water weeks can make a difference.

These events are watering holes for international organisations and individuals to meet, share ideas and forge partnerships.

Stockholm, with its strong attraction for international organisations, is a good channel for matching communities with international donors and funds.

Singapore International Water Week, with its focus on deal-making and practical outcomes, provides a different value: business deals.

Singapore has a well-deserved reputation for good governance, including an efficient regulatory environment for both financial and business law. It also has an international outlook, reaching out to investors in the West and the South, and opportunities wherever they may lie.

Last year's Singapore water week saw a record increase in the number of trade attendees to over 14,000 from 112 countries and regions. The total value of announcements of projects awarded, tenders, investments into Singapore, and research and development memorandums of understanding exceeded \$2.8 billion, up by 27 per cent from 2009's \$2.2 billion.

We have pointed out the niches of different water weeks in different countries. There remains one important niche that is unfilled - looking to the future.

Water problems in 2025 will be vastly different from today's - partly because of crises in different sectors which will have a profound impact on water; partly because of uncertainties brought about by globalisation, free trade, technological and climate change, and migration.

All this will lead to the eventual dissolution of existing water paradigms. The water week that will emerge as the top in 2025 will be the one that focuses on the rapidly changing world, and continuously adapts itself to meet these changes. The world needs "business unusual" solutions for water problems that we cannot foresee today. The city which can meet this challenge successfully will be the global winner.

The first writer is a Stockholm Water Prize Laureate (2006), a distinguished visiting professor at the Lee Kuan Yew (LKY) School of Public Policy and president of the Third World Centre for Water in Mexico. The second writer is a PhD candidate at the LKY school.

Sanitation cuts poverty

BY SAHANA SINGH FOR THE STRAITS TIMES

WHEN the world population was counted in the millions, it did not matter if people defecated in the open.

One could still find places far from habitation for this private activity. Besides, the stools would be covered by soil and soon be absorbed by it. Even if pathogens in the stools managed to reach water bodies, dilution took care of them.

In the past two centuries, the millions turned into billions and today, the erstwhile locations "far from habitation" have all been absorbed into cities which are growing into mega-cities.

It is not surprising that the absence of proper sanitation is affecting more people than ever before. About 2.6 billion people in the world lack access to adequate sanitation, of whom 1.84 billion live in Asia.

Ensuring safe disposal of human and other waste has become one of the toughest challenges of this century.

Many of the great rivers in South Asia and China have been so polluted by solid and liquid waste that large stretches are "dead" or bereft of aquatic life. Such is the pollution that nearly two million children die of diarrhoeal diseases every year in developing countries. To put the figure into perspective, the Indian Ocean tsunami in 2004, which evoked strong feelings throughout the world, had a death toll of fewer than 300,000.

Ironically, the well-meant mission to extend water supplies in developing countries is leading to generation of greater volumes of used water, which in turn is leading to greater pollution of freshwater bodies. Thus provision of water facilities without corresponding arrangements to safely treat the used water generated is worsening the very problem meant to be solved.

It cannot be denied that putting a centralised sewerage infrastructure in place is a resource-consuming exercise. Acquiring land, laying underground pipes, building treatment plants with appropriate technologies, dis-

posing of effluents and other associated activities can be a daunting prospect for governments.

Yet, with so many models of decentralised sanitation available today, providing hygienic and eco-friendly toilets for all should not be the insurmountable task it is made out to be.

A multitude of organisations and social entrepreneurs have proven that even the poor are ready to pay to use toilets or build their own with some help.

In fact, there are sanitation models where the poor can be paid to use toilets from revenues from bio-gas generation. One just has to choose the most suitable from the many financing options available.

The benefits of toilets and improved hygiene have also been amply demonstrated in the form of reduced mortality and lower school drop-out rates. Women are freed from the fear of sexual assault while on the way to answer the call of nature if they have toilets right in their homes.

Perhaps the most persuasive statistic is that every US\$1 (\$S1.20) invested in improved sanitation translates into an average economic return of US\$9. A community empowered with safe sanitation and water is able to rise above its crippling poverty and contribute to the economy.

Countries such as Singapore, Australia, Israel and many others have also demonstrated that used water is a resource which can be re-used in industries, agriculture or even for drinking. When applied in agriculture, treated used water helps to provide nutrients and eliminates the need for chemical fertilisers.

If governments cannot finance sanitation programmes with their own budgets, it makes good sense to allow the private sector to participate. With the experience gained from public-private partnerships in the water sector, it should not be difficult to have similar successes with sanitation.

Stricter government regulations to prevent untreated solid and liquid waste from being dumped in water bodies can help to build the sanitation market, with vendors bringing in management and technological solutions.

At the Singapore International Water Week starting today, a large number of companies specialising in the treatment and disposal of used water in the urban context will showcase their products and solutions to thousands of visitors from around the world. Some played an important role in developing Newater, Singapore's brand of high-grade reclaimed water which is helping the country move towards self-reliance in water.

In the past century, Singapore relied solely on night soil collection for the disposal of human waste.

The transition from that to Newater in the heart of Asia did not happen by chance. It stemmed from a strong belief by the country's founding fathers that only with a modern water and sanitation infrastructure could a nation stand up proudly to take its place in the developed world.

The writer is editor of Asian Water, a monthly magazine on water in the region.