

Looming water crisis in cities worldwide



(Top) An Indonesian worker takes garbage out of a polluted river in Jakarta. (Middle) Thai residents pour organic bacterial water cleaner into the polluted canal at Bangkok's Bang Bua water village community. (Above) A worker clears floating garbage on the Yangtze River near the Three Gorges Dam in Yichang, China's Hubei province. Pictures: EPA & Reuters

Melati Mohd Ariff

KUALA LUMPUR

Tuesday, March 22, 2011 - Page B12

ACCORDING to a United Nations (UN) forecast, more and more people are residing in cities than rural areas. By end of 2008, it was estimated about half of the world's population, that is over three billion were living in cities.

Every second, the urban population grows by two people. By 2050, about 70 per cent of the world's population would be city dwellers! The latest UN estimates stated that the world's population was expected to climb to 9.2 billion in 2050.

World Water Day is celebrated worldwide on March 22. This year's theme is "Water for Cities: Responding to the Urban Challenge".

Water and sanitation are seen as the two main challenges in sustaining human urban settlements to the extent that some experts said without reliable access to safe drinking water and adequate sanitation cities cannot be sustainable.

According to UN's statistics, between 1998 and 2008, some 1.052 billion urban dwellers had access to improved drinking water and 813 million to improved sanitation.

Nevertheless, the urban population during that period swelled to 1.089 billion people, thus putting a dent in progress made.

The UN data also showed that about 27 per cent of the urban dwellers in the developing world do not have access to piped water in their homes.

Water stress

Many cities around the world are suffering from water stress. Experts are saying that coping with the increasing demands of water within the urban areas is one of the most pressing issues of this century!

Prof Dr Chan Ngai Weng of Universiti Sains Malaysia said in India for example, majority of the cities do not get a 24-hour water supply, with average about a few hours a day.

"Some cities do not have enough water. The poor in the cities especially squatters and slum dwellers have no access to piped water."

"They also have to pay a high price for bottled water," he told Bernama, adding that it is thus very appropriate for this year's World Water Day to choose "Water for Cities" as its theme.

Dr Chan said in view of the water stress, there is an urgent need to practise water demand management.

This, he said is for all water consumers including households, hotels, businesses, factories, schools, universities and government departments.

"Water is finite ever since Earth was formed, that is, the quantity has remained the same. Water is merely recycled naturally via the Hydrological Cycle (also known as water cycle)."

"However population is exploding all the time. Agriculture and industries are also expanding to keep up with human needs for food and materials. So, water supply can never keep up with the water demand."

"Hence, the amount of water in the future (which is the same as today's) will have to be shared by the new human beings (babies that will be born in the future) and the existing humans now."

"Worse still, humans may have to fight with agriculture and industries for this water," said Dr Chan who is also President of Water Watch Penang, a non-government organisation focussing on creating awareness for water conservation amongst the general public.

High demand

In Malaysia, it is estimated that between 65 to 70 per cent of the 28 million population live in the urban areas and water stress is fast developing due to high demand both for domestic and non-domestic uses.

S Piarapakaran, President of Association of Water and Energy Research Malaysia (AWER) told Bernama that most of the cities in the country do not have a water treatment plant within their vicinity.

Very few cities in Malaysia, he said have such privileges, citing Taiping as an example.

However, he said the water catchment, Bukit Larut which is the centre point of the town, is currently subjected to threat from development. More than 200,000 people are depending on the water source, he added.

Pollution issues

For a water source that flows through major cities such as Kuala Lumpur, Petaling Jaya, Puchong, Klang and Port Klang, water from the Klang River is not suitable to be treated for water supply.

This is due to high level of contamination that is being discharged by all level of society and businesses into the river.

According to Piarapakaran, such situation will only increase water scarcity incident.

In addition, he said many clean rivers are now drastically being polluted and with growing economy, demand and population, cities are always at risk of water scarcity as well as water stress.

"This is not only due to lack of water resources, but also due to inadequate reserve margin in water treatment and supply. Thus careful planning is vital."

"For example, if there is a water cut for a day with water treatment plant that has only five per cent reserve margin, it will be impossible for the supply system to fill up the service reservoirs, storage tanks and cater the daily demand at one go once it resumes."

"It may take days to actually fill up all the tanks and reservoir to ensure a secured supply," he added.

"Therefore, the Malaysian government should start gazetting all rivers and its basins as well as catchment areas from further development.

Areas which are subjected for development must have stringent waste water discharge standard."

"Any new projects or industries must adhere to a stricter standard. This will reduce pollution levels."

"If we do not do it now, we may need to fork out hundreds of billions to revive it in the future," he stressed.

Bernama

Source URL: <http://bruneitimes.com.bn/features/2011/03/22/looming-water-crisis-cities-worldwide>