

IN DEEP WATER

With water demand fast outpacing water supply, we need to look at new ways of managing our precious water resources.

By Bhupinder Singh

FOR a country blessed with natural resources such as water, it is mind boggling when we are told by the authorities that a water shortage is looming.

With plenty of rain falling throughout the year, why is it that we are unable to plan or collect this water for use during so-called 'dry' seasons?

Critics say the fault lies with the lack of planning. As the population of a state or country increases, it is inevitable that the demand for piped water will increase as well. We don't really need a dry spell to cause a water shortage.

While Budget 2006 made no reference or allocation for water-related undertakings, there is every likelihood that the soon-to-be-launched Ninth Malaysia Plan will address this.

The situation is pressing. A water crisis has been occurring in Negri Sembilan for the past three months, while some parts of Johor and Selangor experienced supply problems as water levels at dams fell due to poor rainfall in the peninsula.

Malaysian Water Association chairman Datuk Syed Muhammad Shahabudin says the water industry is facing the enormous task of restructuring and there's a need for improved service.

The National Water Services Commission

Bill has yet to be tabled. The core issues of non-water revenue (NRW), lack of transparency and accountability, logging of forest reserves that double as catchment areas, and a lack of a clear policy on the sector and related infrastructure continue to take a backseat.

As it stands, the state of the sector is worrying in states like Selangor and Negeri Sembilan. Water demand is growing due to development and industry, and at a faster rate than supply capability, leading to a strain on water resources.

Mismanagement is a major issue. State governments tend to use water revenue sources for non-water matters, leaving the infrastructure to decay leading to the problem of NRW.

A case in point is the situation in Negeri Sembilan. According to Parti Keadilan Rakyat's youth information chief Badrul Hisham Shahrin, the Federal Government was allocated RM132 million for water supply works such as the changing of old pipes, which would help plug the problem of NRW which is at 52% in the state.

'Millions were spent on consultants by the State Government for services that could have been provided by the state water department people,' says Badrul, adding that the water problem now is blamed on the drought and fall in the water levels at the

Sungai Terip dam.

The Auditor General's Report 2002 noted the shortfalls in the implementation of the project, which Badrul says are partly to blame for the water crisis in the state. The State Government says the current water rationing is due to the fall in water levels in the dam.

There are also allegations that a fall the water level at the Sungai Terip dam is due to tree-felling activity in the permanent forest reserve near Bukit Tangga due to upgrading works on the Seremban-Jelebu road. As at the time of writing, the Negeri Sembilan Water Works Department had not replied to our queries on the matter.

To allow logging around a catchment area in a state which is far drier than others is a risky venture as it may compromise the ecological integrity of the area. But history shows that potential big money from logging activity means forest reserves and catchment areas will always attract suitors.

The water crisis could spread north. According to industry estimates, the Klang Valley is poised to face a water shortage by 2007. For 2008, demand for water is estimated at 4,671 million litres per day (MLD) as compared to supply capacity of 4,553 MLD.

Plans to have water transferred from Pahang to Selangor by 2008 to meet the shortage have been delayed due to financing

issues. Meeting the target date is now unlikely. Existing dams in the Selangor are already operating at full capacity and a prolonged rationing incident, as in 1998 due to the El Nino weather phenomenon, could be very damaging.

Puncak Niaga Holdings Bhd now controls the distribution of water in Selangor and Kuala Lumpur. Its chairman Tan Sri Rozali Ismail could not be reached for comment. The Secretary General of the Water Supply Department at the Ministry of Energy, Water and Communications did not respond to issues raised on the matter.

In other states, the water sector also has problems with mismanagement while opportunistic consultants and elements within the water departments work in collusion with businessmen pushing for privatisation of water services and the commoditisation of water.

The lure is easy to see. There is a lot of money to be made in water. The National Water Resources Study 2000-2050 forecasts water demand from domestic, industrial and irrigation uses to increase by 63% by 2050.

Domestic water demand is projected to jump from 5.6 million m³ per day in 2000 to 16.2 million m³ in 2050 while industrial demand will rise from 3.9 million m³ to 15.5 million m³ respectively.

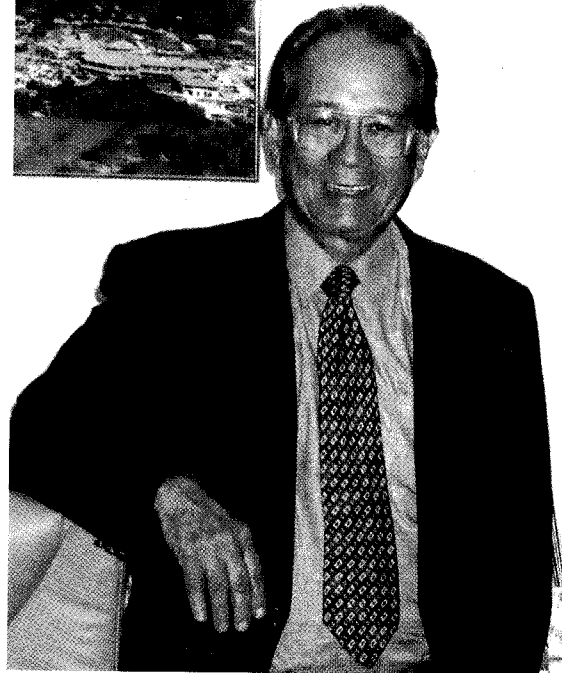
Total water demand for the peninsula is expected to rise from 29.6 million m³ in 2000 to 48.4 million m³ in 2050. The water supply sector will need a total investment of at least RM50 billion over the 50 years and RM22 billion of that is expected to be spent by 2010.

Water utilities can be profitable if the NRW problem is controlled. PBA Holding Bhd, which has lowered its NRW problem to 18%, holds some RM200 million cash on its books.

With water having such money-spinning potential as well as being a vital ingredient for life, there is an urgent need to adopt a new approach to water management. Non-governmental organisations (NGOs) believe leaving the water industry in the hands of the government, be it federal or state, alone could be unhealthy as vested interests would always lobby for concessions.

'A Royal Commission should be set up consisting of various representatives including from civil society who would make decisions based on the best interest of the public and not be influenced by vested groups, politics or business in terms of management and investment,' says Charles Santiago of the Monitoring Sustainability of Globalisation, an NGO.

Santiago disagrees with the general argument put forth to fix problems affecting



Syed Muhammad: Funding is best provided collectively

water supply in some states, that is, to put it in private hands which can raise the billions necessary to finance the much-needed investment in infrastructure.

'If that were so,' Santiago points out, 'why then are the water utilities in Perak and Penang, which are still public controlled, profitable while the privatised entity in Johor is facing problems with water supply in Kluang and Ayer Hitam?'

Syed Muhammad says the best source of funding would have to be sought and is best provided collectively through the centre or federal level rather than through smaller funding from private source.

He says the problems of the sector can be overcome if planning is in tandem with work on the delivery systems, which need a lot of

investment.

Santiago believes cash-rich institutions like the Employees Provident Fund and Socso could provide the money. For one, public money would make the public part-owner of water resources and help encourage better appreciation of water, including being environmentally more responsible.

The sector would also have access to a cheap pool of funds and run well, the water companies would be profitable like in Penang and Perak.

Meanwhile, severe water shortages could plague parts of Malaysia if the dry spells increase in frequency while logging around catchment areas continue and air pollution increase. The rain patters could change, avoiding catchment areas even more.

'Anything could happen from the global warming effect. Rainfall patterns could shift. Pollution in cities cause particles to concentrate around the area and the rain to fall there,' says Dr Rosli Omar, a member of SOS (Save Our Sungai) Selangor, an NGO.

He believes that the authorities may need to restrict population growth and development to match water supply potential. SOS Selangor has done studies on some dams and their findings suggest the life span of dams like the one in Sungai Selangor is much shorter – about 20 years as compared to 70 years due to siltation.

The public should also be held responsible for the water crisis. Syed Muhammad believes consumers have

to assist in water conservation and face the increasing cost in providing treated water. In many developed and developing countries, the usage of water is about 170 litres per capita per day (lcd) whereas in Selangor and Johor (which together take up about half of the total demand in Peninsular Malaysia) the usage is about 270-280 lcd.

'Some 30-40% of treated water could be saved if consumers and users could be persuaded to use water sparingly,' he says.

While the situation is not extremely grave, the federal and state governments need to dramatically change the way water is managed. In the water management business, 50 years is a very short time. The widespread complacency needs to be addressed quickly. **mb**