

# Water Financing Situations in Malaysia

By

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## 1. Water Facts from the 8<sup>th</sup> (2000-2005) and the 9<sup>th</sup> Malaysia Plan (2005-2010)

### 1.1 Non Revenue Water (NRW)

- In the 8<sup>th</sup> Malaysia Plan (2000-2005) NRW decreased from 40% to 38% after replacement of 3380 km of old pipes, old water meters and reduction of pilferages.
- In the 9<sup>th</sup> Malaysia Plan the NRW is targeted to be reduced to 30% by 2010.

### 1.2 Water Supply Coverage

- In the 8<sup>th</sup> Malaysia Plan water supply coverage increased from 92% to 95%.
- In the 9<sup>th</sup> Malaysia Plan water demand for domestic and industrial use is expected to increase at a rate of 6.6% per annum. Water supply coverage is expected to increase to 96.8%.

### 1.3 Sewerage Services

- In the 8<sup>th</sup> Malaysia Plan the number of people provided with sewerage services increased from 6.7 to 8.1 million.
- In the 9<sup>th</sup> Malaysia Plan there will be a continued expansion of sewerage services to serve more people.

## 2. Water Supply Pricing in Malaysia

The current water pricing systems for domestic and non-domestic water supplies in the various States of Malaysia does not reflect the actual costs of developing and providing the water supply. Based on the concept of full cost recovery including opportunity cost of capital, the national average target tariff in Peninsular Malaysia amounts to:

- RM1.03/m<sup>3</sup> in order to achieve a nominal rate of return of 10% (real rate of return of 5.8%);
- and RM0.76/m<sup>3</sup> in order to achieve a nominal rate of return of 4% (real rate of return of 0%).

On a national basis, under full cost recovery at nominal cost of funds of 10% p.a., the Government will be subsidizing the public at RM0.23/m<sup>3</sup> of distributed water. The real cost of water will escalate in future if the subsidy is removed.

## 3. Privatisation of Water Supply Services

Prior to the implementation of the privatisation policy in 1991, for water treatment and distribution, the state governments were responsible for the development and maintenance of water supply for their respective states.

However, after the privatisation policy, the state water supply services were managed and operated by a mix of public and private organisations, such as follows:

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- State public works department (e.g. Kedah, Perlis, Labuan)
- State water supply department (e.g. Negeri Sembilan, Pahang)
- Autonomous state water supply board (e.g. Melaka, Perak, Kuching)
- Corporatised state water authority (e.g. Selangor, Terengganu)
- Privatised water company (e.g. Penang, Johor and Kelantan)

The privatisation has resulted in the participation of private sector financing in the water industry. In the early stages, privatisation was concentrated in the area of water treatment. This did not address the problems of other areas of the water operations such as distribution (non-revenue water) and billing.

Due to the fragmented management and accountability problems arising from the different parties managing different parts of the water supply operations, issues of water resources availability, water quality, reliability of supply and accountability remains a major concern. It is reported that in 2006 the State governments owe the Federal government about RM7.6 billion for loans taken to fund water management projects.

One notable success of the privatisation policy of water supply services is Penang, where the state water authority evolved into corporate status and eventually made a public share offering which was partially taken up by private investors. There have also been several private concessions using the BOT format, with a mixed record of success. The one for sewerage and sanitation services ran into difficulties because of cost recovery problems arising from the lack of payment by the public for the use of such service.

#### **4. Reforms in the Water Resources Sector**

In March 2004 a major consolidation of agencies responsible for water took place in Malaysia, when 11 agencies from 4 different ministries were combined in the Ministry of Natural Resources and Environment (MNRE).

The MNRE will be responsible to look after water resources management and environmental improvement projects such as hydrology, integrated river basin management, flood mitigation, pollution control, forest catchment management, coastal erosion and other resources and environmental related issues.

The cross-cutting water resources management issues continue to be monitored under the National Water Resources Council which is chaired by the Prime Minister, and whose members are Ministers from the related federal ministries and the Chief Ministers from all the states.

#### **5. Reforms in the Water Services Sector**

Also, in March 2004 the Department of Water Supply (from the Ministry of Public Works) and the Department of Sewerage Services (from the Ministry of Housing and Local Government) were moved to a new utility ministry, the Ministry of Energy, Water and Communication (MEWC). The MEWC will manage the water utilities services, such as Domestic and Industrial Water Supply, Sewerage and Hydropower.

Water for Agriculture will remained with the Ministry of Agriculture.

The Federal Constitution was amended in January 2005 to transfer matters related to water supply services from the State list to the Concurrent list. The amendment enabled the Federal Government to regulate the water supply services while ownership and control of water resources, dams and catchment areas remained with the state governments.

Two water bills, the Water Services Industry (WSI) Bill and the National Water Services Commission (NWSC) Bill are now making its way through the Malaysian Parliament. The Bills are aim at creating an effective and efficient water services industry and the formation of the NWSC as a water services regulator. The NWSC will regulate both the water supply and sewerage services. Water service providers and owners of water service systems will be licensed by the NWSC and are required to comply with its service standards and key performance indicators.

To address the funding requirements to develop the water supply infrastructure a Water Asset Management Company (WAMCo) will be established to build the infrastructure and lease it to the service providers. The performance of service providers would be evaluated against its annual 3-year rolling business plan. Under this arrangement service providers are not obliged to develop their water resources assets but rather focus on operations and maintenance. Facilities like dams, weirs and other infrastructures to tap raw water would be provided by WAMCo at a fee to be determined.

Also, under this new arrangement, all State water departments would be corporatised as state-owned water companies which the NWSC would supervise, licence and regulate.

NGOs have expressed fears that the proposed reform in the water services sector, through the two Bills, may lead to a loss of water supply sovereignty. They reasoned that if the water supply is provided on a commercial basis then it may be subjected to a possible takeover by foreign corporations, through the enforcement of the World Trade Organisation General Agreement on Trade and Services, to which Malaysia is a signatory. However, the Minister for Energy, Water and Communication replied that the Government would not liberalise the water industry as it is considered a basic utility and is closed to international market forces.

## **6. National Water Financing Workshop**

A National Water Financing Workshop was held from 21-22, February 2005. It was attended by about 100 people from the government agencies, private sector, academia and NGOs.

The objectives of the workshop were:

- To raise awareness among the public & private sectors and civil society on water financing related issues.
- To make recommendations, on ways to further promote water financing in support of IWRM.
- To discuss principles of financing water resources management and development in a more participative manner involving beneficiaries, private sectors and government to ensure sustainability and equity.

The theme of the workshop is 'Financing Water For All' with particular focus on the following areas:

- Policy, Legislation & institutional Arrangements
- Financing & Privatisation
- NGOs and Community Participation
- Private Sector & Industry Involvement
- River Basin Management
- Land and Water Management

The workshop was preceded by 5 paper presentations which provided the context for the workshop discussions. The participants were reminded on the following points:

- Water Resources & Water Services has financial cost.
- Different stakeholders have different perspectives on water management issues and how they are to be funded.
- What to finance?
- How to finance?
- Who to finance
- Who pays?

The workshop approach was designed to facilitate a collective understanding of the issues involved in the management of water as a resource, and water as a service, and how it can be financed from the perspectives of 4 main interest groups. They are water consumers, business, NGOs (representing the interest of the environment) and the government. Thus, the participants were divided accordingly into the 4 interest groups and were asked to simulate the views of the 4 groups by following a 3-Step Process. The process is as follows:

- Identify the water resources and water services issues that are of concern to their Group
- Select 3 main issues and ask what are the costs or financing problems related to them?
- Ask how and who can finance it?

The following were the main outputs from each of the group.

### **6.1 Consumer Group**

The issues and proposed financial solutions from the perspectives of the consumer group were:

#### **(a) Issues**

1. Wants water supply of high quality and a reliable water supply.
2. Wants better management of the water resources (to prevent pollution which increase cost of water treatment)
3. Wants better management of Non Revenue Water (NRW) so that they, the tax payers do not pay for wastage and theft of the water supply

#### **(b) Financial Solutions**

1. Government to provide funds to ensure quality & reliability.
2. Government and responsible water supply business to fund awareness programs to minimise pollution of water resources and to increase enforcement to penalises polluters

3. Government to co-share with water business operators to replace the pipes to reduce NRW and increase enforcement to reduce theft

## **6.2 Business Group**

The issues and proposed financial solutions from the perspectives of the business group were:

### **(a) Issues**

1. Consumers have high service expectations but low willingness to pay for the service.
2. Water business is risky, with low Return on Investment (ROI) and long payback period.
3. Compliance to environmental performance requirements is high, which increases the risk of the business.

### **(b) Financial Solutions**

1. Staggered tariff structure to address low willingness to pay for service - low price for essential use (consumption/sanitation) and higher for excessive wastage usage.
2. Government to provide tax reliefs and soft loans and act as guarantors for loans to increase ROI for business.
3. Government to be responsible for the pollution risk.

## **6.3 NGO Group**

The issues and proposed financial solutions from the perspectives of the NGO group were:

### **(a) Issues**

1. Wants to be consulted by the Government whenever decisions on water policy and projects are made and implemented.
2. Wants clear incentive and mechanism to protect catchment areas.
3. Wants Government to take actions to manage water demands.
4. Wants Government to increase monitoring and enforcement to protect water resource.

### **(b) Financial Solutions**

1. Government to charge for water extraction and ensure legislation is revised to provide state to have incentives to protect & conserve catchment areas.
2. Government and water business operators to fund water demand management schemes.
3. Government to fund programs to increase monitoring and enforcement to protect and prevent pollution of water resources.

## **6.4 Government Group**

The issues and proposed financial solutions from the perspectives of the Government group were:

### **(a) Issues**

1. With so many demands from the consumers, business and NGOs the Government group has decided to prioritise the issues to be addressed.
2. The Government Group used 6 criteria to prioritise the issues to be addressed by them.
3. The proposed financial solutions for the 6 issues are to be addressed by a Central (C) or Decentralised (D) entity, or through an Intermediary (I) like a business entity.

**(b) Financial Solutions**

<b>No.</b>	<b>Issues</b>	<b>Financial Recommendation</b>
1.	Sustainability for Water Resources	C & D
2.	Pollution	C , D , Based on No. of Water Users
3.	Awareness & Education	C, I & D
4.	Integrated River Basin Management	C, I & D
5.	Tariff	C (Now), Liberalization (Future)
6.	Legislation & Enforcement	C & D

The main conclusions from the workshop were:

1. Consumers want the Government to provide funds to pay for the cost of water.
2. NGOs wants to be consulted and wants the Government to allocate funds to protect catchment areas and to manage water demand.
3. Business wants better ROI and lower risk for their investment.
4. The Government has to recognise that in order to address the water issues in a comprehensive and sustainable way it has to fund programs to address all the 6 prioritised issues.
5. Funding for the other programs - water demand management, catchment protection, integrated water resources management and awareness programs is necessary to complement the traditional solution to invest in more capital works to meet demands.