



## Privatization of sewerage services in Malaysia

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SEWERAGE SERVICES ARE an important urban development and service that is crucial towards promoting sound urban health. It consists of facilities for the collection, treatment and disposal of human waste and other wastewaters generated from urban dwellings and commercial facilities. Sewage contains biological and chemical constituents and a variety of pathogenic organisms, all of which can pose serious public health threats. In Malaysia, sewage has also been incriminated as the major polluter of surface waters. The proper disposal of sewage has lagged behind the provision of water supplies to urban populations, and there exists a situation now where water supply sources are in danger of being contaminated with sewage. As rapid urbanisation takes place, urgent attention needs to be given to sewerage development and management. This paper provides a broad overview of sewerage development in Malaysia and briefly describes the move made towards privatization of this sector in Malaysia.

In the 60's and 70's, septic tanks formed the bulk of sewerage systems. As the urban population grew, centralised systems evolved. Bucket latrines, hanging latrines and pit latrines were common facilities. The bucket system prevailed for a very long time until as late as 1990. Drastic measures were needed. The Government launched many strategies to combat the deteriorating urban sanitation situation.

The National Sewerage development programme was launched in the 70's, with the aim to develop modern sewerage systems for each major urban centre in a planned and systematic manner. Under this programme 19 sewerage master plans were prepared. For once, the urban sanitation problems were studied and documented.

However, funds to implement these comprehensive master plans were limited. Only 9 of these urban centres could partially implement the master plan proposals. The revenue base of Local Authorities also could not support the huge expenditures involved. Subsequently efforts were directed towards decentralizing sewerage facilities.

In order to reduce the backlog of urban sanitation facilities, the Ministry of Health spearheaded efforts to ensure that all new developments had sewerage systems incorporated as part of the overall development. This then left only the older urban areas that needed refurbishment with new sewerage facilities. This is when many oxidation ponds, and aerated lagoons were constructed as low cost sewage treatment and disposal facilities.

With time, these gave way to more sophisticated systems such as rotating biological contractors, activated

sludge plants, extended aeration and others. There was a proliferation of companies importing foreign technology for sewage treatment. An Inter-Ministerial Committee was formed to approve systems to be used in Malaysia. The intention here was to vet and approve companies and systems that met high standards and that were able to be adapted to local condition.

Over the last two decades there have been great improvements in urban sanitation. Table 1, provides the urban sanitation coverage statistics for 1970, 1980 and 1990. Even with all these, the insanitary older built up environment, the need to operate and maintain the growing number of communal sewage treatment plants, the shortage of funds, lack of manpower and expertise and rapid urbanisation, put a heavy burden on Local Authorities throughout the country. This situation then gave rise to the need to accelerate development in this sector and in keeping with the National Privatization Policy, the private sector was encouraged to look into and develop this sector. This finally led to the privatization of sewerage services nationwide with the award of the concession to Indah Water Consortium in December 1993.

To enable privatization of sewerage services, the Sewerage Services Act 1993 (SSA) was enacted, which facilitates the transfer of sewerage related assets, responsibility and authority pertaining to all sewerage matters from the local authority to the Federal Government. This transfer will also include the transfer of all local authority staff to the consortium. A Sewerage Services Department has also been created in the Ministry of Housing and Local Government, headed by a Director-General, to carry out the regulatory function, macro planning, research and development, policy formulation review and coordination.

The country is moving positively towards environmental consciousness and sewage pollution will be a thing of the past. This then will call for the application of the user pay principle. Those who did not pay for sewerage services in the past will now have to pay for the service.

The agent in the form of private consortium has been identified and entrusted with the responsibility of sewerage development and management in Malaysia. It is expected that efficient sewerage services will be provided, contributing to clean and healthy urban areas and safe guarding surface water from contamination. The impetus given to privatization of sewerage services is expected to initiate and promote Malaysian low cost technology for sewerage systems which will then set the stage for export of technology and expertise to other developing countries.

The lessons learnt from sewerage services development and management will contribute and even promote similar approaches for other sectors such as solid waste management and urban drainage.

The Malaysian Government has taken the bold step in facing the truth that urgent action is needed to develop and manage urban sanitation services. The complex initiatives towards privatization is testimony to this fact. All Malaysians need to be made aware of the benefits of these initiatives so that positive support is received for greater success. The successes in the sewerage sector will greatly influence other urban services in Malaysia all of which will be gearing towards clean, healthy urban centres keeping in line with the aspirations of Vision 2020.

### Reference

Sewerage Services Act, 1993.

**Table 1 - Sanitary Facility Coverage**

| Type of Facility                        | % Population Served |      |      |
|---|---------------------|------|------|
|   | 1970                | 1980 | 1990 |
| 1. Central Sewerage System              | 3.4                 | 4.0  | 5.0  |
| 2. Septic Tank/Communal Treatment Plant | 17.3                | 21.8 | 37.3 |
| 3. Pour Flush Latrine                   | 2.6                 | 30.3 | 45.0 |
| 4. Bucket Latrine                       | 19.8                | 7.7  | 0.0  |
| 5. Pit Latrine                          | 29.9                | 15.3 | 4.3  |
| 6. Hanging Latrine                      | 9.4                 | 4.5  | 2.1  |
| 7. No Facility                          | 17.7                | 16.4 | 6.3  |

Source: 1970 & 1990 population census and 1990 estimates by Ministry of Housing and Local Government.