

INTRODUCTION

Water plays a vital and invaluable role in our lives. It is indispensable for the sustenance of the ecosystem and all life forms and the operation of most socio-economic activities. Water IS life.

It is a priceless commodity. Though a natural and renewable resource, it is at the same time finite. Therefore, we cannot infinitely increase our demand on this commodity. If the limits are reached, there will be no more water, even if it is free. Also, if it is polluted and unsafe, its value to all is endangered.

WATER SUPPLY

Malaysia has abundant water, the sources being rain, rivers and underground aquifers. The average annual rainfall over our landmass is 990 billion m³. We have about 150 major rivers and our aquifers are amply charged.

The water we consume comes mainly from rivers and the other two sources are underutilised.

Yet there is worry about water scarcity. In Selangor, Sungei Selangor is the last river to be sourced for water and inter-state transfer of water from Pahang to Selangor is being considered.

WATER DEMAND

In Malaysia, rapid population growth and economic development in the past few decades have led to an extraordinary increase in water consumption and stressed the supply and delivery system.

Some other factors associated with demand and scarcity are wastage, inefficient use, pipe leakages and pilferage.

Wastage arises because people think there will always be water and take it for granted, and also because it is cheap. It is cheap because it is subsidised and environmental costs are not factored into the price of water. Over-indulgence and luxurious use of water results in excessive and inefficient consumption.

We can consume water more efficiently and reduce our consumption, if we organise and discipline ourselves e.g. flush the toilet no more than 3 times a day per person. We can also install water saving devices e.g. low flow taps, dual-flush toilets, sprinkler heads for garden hoses.

WATER POLLUTION

To a very great extent, it is human activities which pollute water resources, making it unsafe for many uses. Indiscriminate dumping of rubbish and discharge of other wastes into rivers by individuals, industry, farmers and other sectors degrade water quality.

Soil erosion caused by land development result in siltation of rivers.

The scale of the problems is enlarged because of rapid population growth and economic development.

FLOODS

Flash floods in urban areas are increasing in frequency and severity.

One cause is uncontrolled development activities in watershed areas and along river corridors. Another reason is the high rate of sedimentation in rivers as a result of soil erosion.

In urban areas, the practice of maximising built-up and paved areas for commercial gain render large expanses of the land surface impermeable by water. It is also a popular practice for house owners to cement or pave their gardens to convert them into car parks or simply because they do not want to cut grass.

Before the land was cleared, vegetative cover intercepted rain which infiltrated into the ground and took time to flow into drains and rivers. But rain which falls on roofs and paved areas, quickly collect and travel to drains which rapidly send it to the nearest river. At peak times, when drain and river systems cannot cope with the excessive and rapid loads, floods occur.

The habit of using drains and rivers as rubbish dumps also cause floods because it causes blockage.

The approach of widening and deepening rivers to prevent floods is not sustainable because urban runoff will grow with increasing urbanisation and with it, increasing impermeable areas.

Rainwater harvesting , by storing stormwater, is an option to reduce urban runoff. Besides, it can ease the demand on other water sources.

WATER PROBLEMS

In Malaysia, water problems are largely associated with wanton wastage and inefficient use which make water scarcity an issue. Old pipes which leak and pilferage impact on the supply of water. Water pollution is a serious problem. Floods cause severe environmental, economic and social problems.

CONCLUSION

Socio-economic development must be carried out alongside measures for environmental protection, otherwise, environmental degradation will nullify real progress. Landuse and water resource management must take into account the interdependence of all sectors, including the ecosystem, on each other. People at large must internalise in themselves good water-saving habits, to reduce their consumption of this vital and finite resource.

HOW CAN YOU HELP? Practise good water saving habits:

Install water-saving devices e.g. dual-flush toilets, slow-flow taps and shower heads, sprinklers for garden hoses.

Organise yourself so that you flush the toilet no more than 3 times a day.

Take showers instead of scoop or tub baths. Take smaller showers.

Shut off the water when soaping yourself or brushing teeth.

When rinsing vegetables, save the water for soaking pots or for the first rinse of dirty dishes.

Wash only full loads in your washing machine.

Select a front-loading washing machine as it consumes less water than a top-loading one.

Use a bucket instead of a hose when washing the driveway and use a broom to sweep away leaves and other debris instead of hosing them away.

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