

Solution to salt water intrusion

Adjustable dam a need of the hour

by Harshini Perera

Despite the beauty of the sea etched in the hearts and souls of people it can cause many problems to humans. One such problem has reached its pinnacle. Eng. K.P.R.S. Samarasinghe, Assistant General Manager of Water Treatment Plant in Ambat-ale, explained that the water supply in Colombo and suburbs has to be curtailed unless instant remedial action is taken about saline water intrusion.

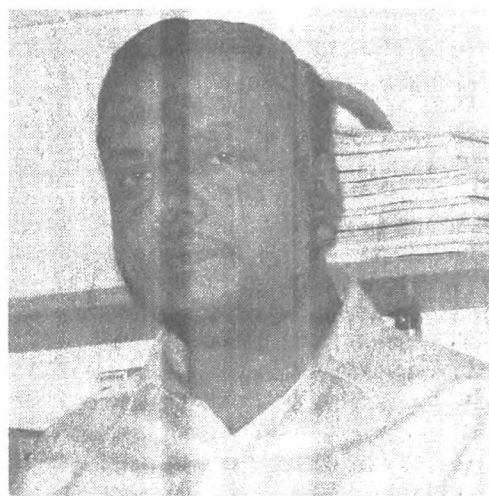
Further, explaining the situation he said that due to the severe drought and rapidly deepening river bed, water level of the Kelani River has gone down to 0.5 msl (mean sea level). Consequently during high tide, saline water flows into the river. Saline water contains high levels of dissolved solids and is generally considered unsuitable for human consumption.

"Ambat-ale intake is the main supplier of water to the city of Colombo and its suburbs, which produces 120 million gallons of water per day and dis-

tributes water to 15 to 20 centres. Saline water has reached two kilometres into the river from the point of Ambat-ale water intake. The effects of the deepened river bed, due to illegal sand mining from Ambat-ale to Modara area had intensified due to drought. However, two thirds of the river up to Ambat-ale is filled with saline water and we have laid a barrier with sand sacks to avoid any danger", explained Eng. K.P.R.S. Samarasinghe.

B.A. Peiris, Deputy Director (Mines), Geological Survey and Mines Bureau, noted that the sea water intrusion has become both an environmental and social issue and should be addressed immediately.

"Three years back we faced the same scenario, but could not initiate an effective solution. Therefore, we had to face the same situation again. Some serious steps should be taken immediately for Sri Lanka doesn't entertain a high technology of purification of salt water like Saudi Arabia. We could cancel approximately 20 to 50



K.P.R.S. Samarasinghe

sand mining licenses which we thought would lessen the damage it caused to the river beds and banks." He explained further.

"Under the "South Bank Development of Kelani River" project to which Danish financial aid is forwarded, we are planning to build a permanent adjustable river barrier across Kelani River. We found temporary sand sack barriers difficult to maintain, overflowing in the periods of flood and people complaining of their houses being flooded solely because it cannot be adjusted. So, there has been a proposal to build a permanent barrier of which the height can

be adjusted, by the end of year 2010." People should make an attempt to reduce consumption of water at least till the rainy season arrives. Places like factories, service stations and hospitals should use water meticulously, so that the wastage of water will be reduced. In that way a curtailment of water supplied by National Water Supply and Drainage Board can be avoided. Therefore, public is also advised not to waste water unnecessarily.

True enough that access to hygienic water is a fundamental right of every citizen but at the same time they should use it aptly.

Sand sack barrier to minimize salt water intrusion

