

Environment

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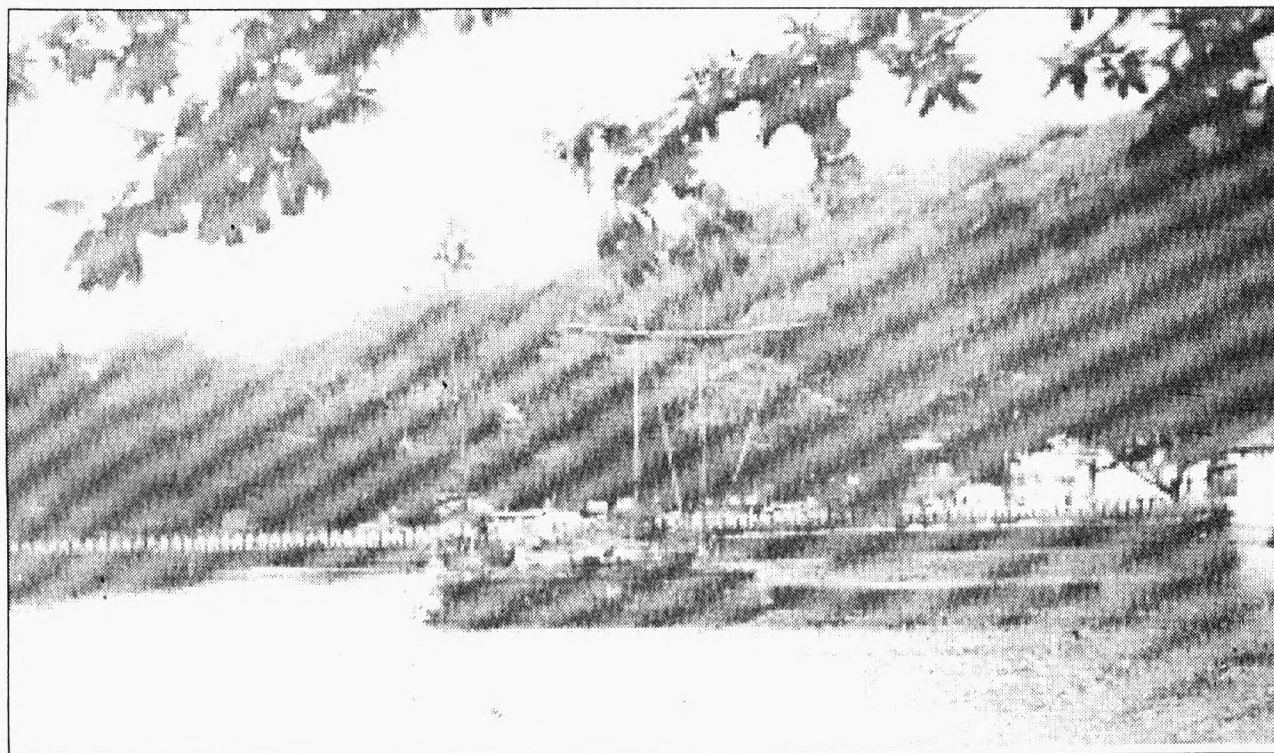
Dereliction of the Kandy Lake goes on apace

Our drinking water supplies are getting polluted at an alarming rate and getting increasingly contaminated with toxic chemicals. Water bodies such as rivers and lakes are getting contaminated owing to negligence on the part of the population at large and also the inactivity of authorities involved in environmental law enforcement. Local authorities who dump garbage into waterways and do not enforce basic sanitary rules are also responsible for this alarming situation. One case in point is the pollution of the Kandy lake which hits newspaper headlines quite often. Pollution of the Kandy Lake is nothing new and every time this happens officials of the Central Environmental Authority, public health officials of the Kandy Municipal Council visit the scene and claim that the Kandy lake is indeed polluted and the matter ends there.

City fathers talk of grandiose plans to curb the flow of pollutants into the lake but nothing in the way of enforcement is ever done. There is no need for all these officials to visit Kandy since the algal blooms and the fish population dying are common problems associated with severe pollution of the lake caused by dumping of raw sewage into the lake. Anyone with a rudimentary knowledge of science understands this as the process of eutrophication brought about by excessive amounts of nitrate, phosphate and organic matter arising mainly from the human waste.

These days the algal bloom is spreading throughout the Kandy lake and appears like a green carpet everywhere. When there is a lot of these green algae, the dissolved oxygen levels in the water below gets depleted and the fish die due to suffocation. The stench emanating from the Kandy Lake is due to rotting fish and is very similar to the foul smell which we find around the Beira lake in Colombo. Again there are ambitious plans to clean up the Beira lake but without removing the shanties which line the shores of Beira lake it will be a futile exercise.

The main reason for this type of pollution is



The Kandy Lake

that raw sewage is allowed to enter the Kandy Lake from households and hotels. One leading hotel around the lake has a sewerage treatment plant which works well and the sewage from all other hotels, guest houses and homes seep into the Lake causing the pollution we see. Very often, the sewerage systems of houses are not built according to specifications laid down by the municipality since constructing a proper septic tank and a soakage pit require a fair amount of space. There is always a possibility of waiving these requirements due to pressure from influential persons who live around the Kandy lake and also due to corrupt officials. The result is that in certain cases raw sewage is fed directly into the lake which aggravates pollution.

In addition to the destruction of the fish population and the adverse aesthetic effects of

the lake these algae produce a group of highly poisonous group of chemicals called algal toxins. These are toxic even at very small concentrations and their health effects are considerable. In many other countries the presence of these toxins is monitored in drinking water supplies. Unfortunately, in Sri Lanka our water

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purification process is so primitive that monitoring is limited only to checking for the presence of microorganisms such as bacteria. During the process of purification of water by chlorination a class of chemical compounds known as chloroaromatics is produced. These compounds are carcinogenic and many countries have now shifted from chlorination to

other methods of water purification.

There are several intakes downstream along the Mahaweli river from the meda-ela which brings lake water to the Mahaweli river where water is tapped for domestic use at Polgolla, Kundasale and Nattarampotha. It is important to monitor for the presence of these algal toxins downstream since it affects the health of ordinary people.

The natural question then is

to ask, what can be done to arrest this menace? We had a golden opportunity of creating a cleaner city of Kandy which necessarily includes the Kandy lake until a few months ago. A massive Japanese aid project to the Government of Sri Lanka to commission a central sewerage system for Kandy got derailed owing to bureaucratic bungling. Feasibility studies on this project were done by a team of Japanese experts and local consultants and a central sewerage treatment plant was proposed at Getambe which was shut down due to opposition of a few residents of the area. The last resort was the site at Gannoruwa which the Agriculture Department was not willing to give. This shows the total lack of planning on our part of not looking into details of a project before it is implemented. As a result millions

of rupees of foreign funds went down the drain and the hope of a sewerage system for the city of Kandy died of a natural death.

The net result of all this is that Kandy city will become one of the dirtiest cities in the country. People around Suduhumpola discharge raw sewage from their toilets down to meda-ela and all these end up in the drinking water supplies of our city and its environs. Along with the sewerage system the proposed water supplies scheme again a part of this Japanese aid project was cancelled thus preventing a large number of villages getting access to safe drinking water. This can be described as a crime since the government will never have the kind of funds required for such a colossal project. So much for bad planning and the lack of a vision and leadership on the part of our policy planners. Had this project been implemented Kandy will have its water problem solved and a central sewerage system in operation within one or two years. Pollution in the Kandy lake would definitely have been solved since all sewage could have been connected to main sewage lines for safe disposal at a central treatment plant with state-of-art technology from Japan.

Now there are some who try to remove the algal growth and dump it elsewhere to curb this menace. This is a totally meaningless exercise and will not help to reduce algal growth. The only course of action now is to try and reduce the flow of raw sewage to the lake by emptying the septic tanks and dumping sewage somewhere else. It remains to be seen whether this will be a solution but at least the municipal authorities should enforce the existing regulations about the need for every household to have a septic tank and a soakage pit. Public health officials should inspect septic tanks at every hotel and guest house in the locality and make sure that they are not overflowing with raw sewage. Any steps done in this regard should involve not only the politicians and the administrators but also scientists who have studied the water quality of the lake for many years.