MARRED BEAUTY OF DAL LAKE, KASHMIR

Ir Ellias hin Saidin

A Vice President in IEM, Ir. Ellias has over 35 years' experience as a specialist consultant in Civil Engineering infrastructure for development, water resource, water conservation, environmental engineering and water quality.





Houseboats mirrored on the still surface of the lake

y wife and I flew into Amritsar in early September 2018 and took the overnight sleeper bus for a 200km trip to Jammu, Kashmir, and then a Chevrolet MPV for the scenic 270km journey along winding mountain roads to the high Himalayan mountains of Kashmir Valley.

We took a shikara (row boat) over the tranquil, mirror-like Dal Lake to a wooden houseboat, our lodging for the week. Motorised boats are not allowed on the lake.

A tourist attraction, Dal Lake has been called Lake Of Flowers and Jewel In The Crown Of Kashmir. Along its 15km shoreline, Emperor Jahangir built Shalimar Bagh and Nishat Bagh, two grand Mughal-style gardens with scenic views of the beautiful lake.

Alas, Dal Lake is heavily polluted today! If efforts to arrest the degradation of the lake fail, it will jeopardise the boathouse tourism industry.

The lake once covered an area of 75 sq kms but has shrunk to 12 sq kms in the last two decades. Its depth is also down by nearly 12m. Dissolved oxygen levels are down from 10.2 mg/litre to 6.8 mg/litre (a level below 5mg/litre will cause stress to fish).

While fingers are pointed at the current 1,200 boathouses, the actual source of pollution lies from the estimated 50,000 population along the shoreline and islands as well as Srinagar city. Houseboats are responsible for just three per cent of the pollution. In 2017, according to Srinagar's Lakes & Waterways Development Authorities (LWDA), 50 MLD of sewage are discharged daily into the lake, of which 20 million litres are untreated.

To make things worse, 15 major drains discharge into the lake while agriculture and farming in the area means an overland flow of pesticide, fertiliser and waste into the lake. LWDA also estimates that nearly 80,000 tonnes of silt, 31,000 kg of nitrates and 4,000 kg of phosphates are added annually to the lake.

Kashmir's turbulent political situation does not help, with only 435 of 6,000 families living in the lake area being rehabilitated. Attempts to relocate all the houseboats to one location for ease of infrastructure and facilities have failed. Since 1971, restoration plans include proposing a buffer of 200m and demolition notices to 300 hotels, restaurants,

offices and residences. In May 2019, the government stopped further registration of houseboats.

As for the houseboats, prototype innovative floating bio-digesters have been installed to treat sewage, with biogas being generated for cooking purposes. Inevitably, large financing with implementation and enforcement of development and planning needs to be carried out.

The window of our 2-room houseboat looked out on the lake. Moored away from the busy, noisy shoreline meant a quiet and peaceful stay.

From the verandah, the long chain of houseboats set against the backdrop of the hills, was picturesque. We watched activities on the lake while lounging on the front verandah of the boat.

We had hot water, comfortable beddings and carpeted floors. Heaters were available only in winter and during our stay, the ceiling fan proved cooling both in the day and at night.



In a shikara row boat. Motorised boats are not allowed on the lake



Heavy vegetation growth will lead to eutrophication