

A Canal Network in Metropolitan area

ARUNIMA GUHA

Dept of Architecture, Jadavpur University, Kolkata

There are many cities in water basin, river deltic region and on the coastal area. Urbanisation has spread and cities have become larger by sprawl expanding into agricultural land and filling up the waterbodies. In this process unsustainable urban development has changed urban ecological aspect and canals, streams and rivers have suffered. In many cities, revitalisation and consrvation of rivers and canals have been taken. They are important element in urban hydrology plan. They can be a souce of water, help vegetation growth allows navigation, provides recreation and these enhance aesthetcs of the city.

Kolkata is full of canals. It was built more than 300 years ago an marshy land. The city grew into a megacity by filling up water bodies, canals etc. Like Bangalore or Venice, these canals are linked with the rivers but now silted, unfit for navigation for pollution, banks, are encroached by squatters and waste both solid and liquid is dumped in the canal at many placess. Some canals are delinked from main river, some have become defunct or with blockage flow and there is change in character. The revitalisation is important with the improvement of environment. Kolkata Metropolitan Area has 1835 km of canals of which 76 km are man-made. Though upstream flow is necessary to clear sedimentation and intrusion of saline water into urban area and water logging can be reduced with downstream flow with improvement of outfall canals.

Vision or master plan for Kolkata Metropolitan Area, developed by Kolkata Metropolitan Development Authority has included canal improvement, river bank development, preservation of wetland etc but unsustainable development are taking place including construction of housing estates etc. on wetlands and closing the canals. It is necessary that canal network will be a part of urban hydrology and environment plan for the metropolis. The future landuse should be based on these.