Re-Integrating Historic Lakes into the City Fabric in the Case of Vandiyur Lake, Madurai

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Abstract: The traditional lake system of an ancient town is a network of water holding blue spaces, erected further than 2000 years ago by the rulers of ancient cities and maintained for centuries by the original communities. These blue spaces form a micro-watershed wherein an individual tank has its own catchment, tank bed area, and command area. These lakes are connected by a common sluice from the upstream tank, thereby feeding the downstream tank. The lakes used to be of socio-economic significance in those times, but the rapid growth of the city, as well as the change in systems of ownership of the lakes, have turned them into the backyard of urban development. Madurai is one such historic city to be facing the issues of finding a balance to the social, ecological, and profitable requirements of the people with respect to the traditional lake system. To find a solution to problems caused by the neglect of vital ecological systems of a city, the theory of transformative placemaking through water sensitive urban design has been explored. This approach re-invents the relationship between the people and the urban lakes to suit the modern aspirations while respecting the environment. The thesis aims to develop strategies to guide the development along the major urban lake of Vandiyur to equip the lake to meet the growing requirements of the megacity in terms of its recreational requirements and give a renewed connection between people and water. The intent of the design is to understand the ecological and social structures of the lake and find ways to use the lake to produce social cohesion within the community and balance the city's profitable and ecological requirements by using transformative placemaking through water sensitive urban design.

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