

**DEVELOPMENT OF A SIMULATION MODEL TO ANALYZE THE DYNAMICS
OF A PERIPHERAL WETLAND SYSTEM OF THE BATTICALOA LAGOON AT
SINNAUPPODAI**

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ABSTRACT

Peripheral wetland systems such as that of Sinnauppodai, on the shores of the Batticaloa Lagoon play an important role in regulating the environmental dynamics of the locality. Of paramount importance in these regards is the hydrological functions peripheral wetlands play in their local environment. Flood mitigating and ground water recharging potentials of the lagoon based peripheral water bodies/wetland system at Sinnauppodai are explored in this paper by simulating the dynamics of the system in a model named HYDROB 1 developed on the Ms Excel modeling platform. Further more, the hydrological aspects of the peripheral wetland system of the Batticaloa Lagoon at Sinnauppodai is exemplified with three different scenarios developed based on the climatic and socio - environmental issues prevailing in the area.

Key words: Dynamics, Modeling, Peripheral water body, Recharging, Scenario, Simulations