3 AIM AND OBJECTIVES

The proposed research work is aimed at assessment of seasonal dynamics in water and sediment quality, nutrient levels and biodiversity. Following objectives are set to achieve the same.

a) Assessment of nutrient dynamics
b) Assessment of sediment carbon & nutrient concentrations and their spatio-temporal variations
c) Assessment of faunal and floral diversity of the reservoirs.
d) Evaluation of water bodies with reference to water and sediment quality

Justification:

The study incorporated holistic approach to understand the inter-dependency of various wetland parameters such as water quality, sediment quality and associated phytoplankton (floral) as well as avifaunal (faunal) diversity. This was attempted to have a thematic view with different layers of information pertaining to the same to enable a versatile approach in management of such systems, if needed. The justifications of setting up specific objectives are as follows:

a) Assessment of nutrient dynamics in water provides an insight about their trend. This is helpful in understanding the stages of the year where the nutrient concentrations are least and the times where they are at the peak. Water nutrient concentrations affect the overall productivity of an aquatic system which deems it to be an important component to study.
b) The sediments often act as sink as well as the source of carbon as well as nutrient. Knowing the sediment concentration of carbon and nutrients help understanding the probable state of nutrient concentration in water. This is also important component to study since some water bodies have autogenic sources of nutrient enrichment.
c) The phytoplankton as a floral component and avifauna as a faunal component are the immediate respondents of water quality and ecological integrity respectively. Thus, the components were selected to view the wetland as a biotic-abiotic interactive system.

d) Evaluating the water bodies with respect to the nutrient concentration is need of the study since this adds knowledge for the further policy and management related decision making processes.