The present work CERTAIN ASPECTS OF LIMNOLOGY AND FISHERY OF BASKANDI LAKE OF THE CACHAR DISTRICT OF ASSAM portrays the present status of the various limnological and fisheries parameters associated with the overall productivity of the oxbow lake. This work is based on field surveys, laboratory analyses, collection of specimen and their identification, study of their numerical density/biomass/yield and determination of correlation if any, between and amongst different parameters. The preliminary field surveys have been started in November 1996, while recording and analyses of the
different limnological and fishery parameters are started in January 1998 and continued up to December 2000. A summary of the investigation is prepared based on the overall findings:

1. The hydrotopography of the lake has been studied with particular reference to the characteristics of catchment, morphology, morphometry and climatological parameters.

2. An extensive investigation has been made on the principal parameters of water having relevance to the present work. Edaphic parameters relevant with the productivity of the lake have been investigated.

3. Limnoplankton have been studied separately as phytoplankton and zooplankton. Identification up to possible genus/species have been made. Seasonal incidence and occurrence density in the lake during the study period have been investigated.

4. Aquatic macrophytes of the lake have been identified up to genus/species level. Macrophytic distribution, composition and monthly biomass production are investigated.

5. Ichthyospecies of the lake have been identified up to species level. The monthly fish yield of the lake have been recorded from fish landing data and trend of Indian Major Carps and *Hilsa* has been portrayed to find out the ichthyological potentialities of the lake.
6. The synthesis of the observed and analysed data is made to draw extensive discussion. The inter relationship amongst the various parameters have been studied and their bearing on fish productivity have been analysed statistically.