

ASSESSMENT OF WATER QUALITY AND FISH DIVERSITY OF TONS RIVER, SATNA (M.P)

ARCHANA TIWARI¹, SADHANA CHAURASIA¹ and SHIVESH PRATAP SINGH²

¹*Department of Energy and Environment, M.G.C.G.V, Chitrakoot, Satna (M.P.)*

²*Department of Zoology, Govt. Autonomous P. G. College, Satna (M.P.)*

ABSTRACT : The over-exploitation of fish resources coupled with fish habitat destruction result in the shrinkage of fish production. The growth of fish and productivity is highly dependent on the physico-chemical characteristics of the river water. Fish samples were collected quarterly during March,2013-February,2015 from river Tons with the help of local fishermen. Ecological features of the fish habitat and color of fish species were recorded throughout collection. Scientific identification of fishes is based mainly on external characters such as body shape, length, mouth and nature of fish spines, scales etc. The dissolved oxygen and biological oxygen demand were recorded satisfactory in the river for fish growth and survival. Most of the physico-chemical parameters were found pertinent for fish survival and reproductive multiplication. Thus, the observation of limnological status of river is satisfactory for fishes during our examination period. Various quality parameters were measured including pH, total suspended solid, total dissolved solid, total hardness, calcium hardness, magnesium hardness, total alkalinity, chloride, dissolved oxygen and biochemical oxygen demand. All parameters of river Tons was found within the permissible limit. The fish species belonging to 06 orders, 09 families were collected from river Tons. The data analyses suggested that fishes of Cyprinidae family were found predominantly in the locations considered for present study.

Key words : *Assessment of water quality, Physico-chemical characteristics, Fish diversity.*