

LAND USE CHANGE IN THE PERIPHERIES OF WETLANDS AND ITS IMPACT ON THE WATER BODIES: A COMPARATIVE STUDY IN THE DEEPOR AND URPAD BEELS OF ASSAM, INDIA

PRADIP SHARMA

Associate Professor, Department of Geography, Cotton College, Guwahati, Assam, India

ABSTRACT

Assam, the only plain state amidst six hill states of Northeast India is endowed with as many as 5097 wetlands which size more than 2.25 hectares. Less than that size account 6081. The distribution, shape, size, depth, flora-fauna etc. of the wetlands in Assam are largely depend on the geo-ecological condition of the region and human activities in the peripheral areas.

Keeping aside the rivers and streams the wetlands of the state have been classified into five categories depending on the shape characteristics. These are linear, compact, irregular, discrete (fragmented) and ox-bow wetlands. The shape characteristics speak many things about the origin, distribution and land use condition wetlands and it peripheries.

Here, in this research the land use change in the peripheral areas of two wetlands viz. Urapad Beel and Deepor Beel, both falls almost in same ecological condition have been studies and compared based on satellite data of three different years 1977, 2007 and 2014 using GIS software supplemented by field observation. The impact of urbanization and changing pattern of land use in rural environment has been analyzed aiming at such study to be continued in other wetlands of Assam.

KEYWORDS: Wetland, Peripheral Areas, Land Use, GIS, Urbanization