

GEO-ECOLOGICAL STATUS, CONSERVATION AND MANAGEMENT OF THE HAHILA BEEL IN NAGAON DISTRICT, ASSAM

Banashree Saikia and D. Sahariah

Department of Geography, Gauhati University

E-mail: *banashrees2012@gmail.com*

Abstract : Like other ecosystems, wetlands are also confronted to a variety of deterrents leading to its premature degeneration. This paper is an attempt to examine the geo-ecological status of the Hahila beel in Nagaon district, Assam and also the factors responsible for degradation of the wetland so as to provide some measures for its conservation and eco-restoration. The changing land use pattern in the marginal wetland areas is contributing gradual shrinkage of wetland areas, creating a hurdle to otherwise sustainable wetland ecosystem. Expansion of agricultural activities, excessive use of chemical fertilizers, pesticides and insecticides are creating a condition of threat to the wetland biodiversity. The study has been carried out on the Hahila beel which is one of the prominent wetlands in Nagaon district of Assam. The local people have encroached wetland areas for sustaining their livelihood. These have resulted in dreadful conditions of wetland habitat and reduced the level of biodiversity. Therefore, a comprehensive study is very important to put forward some conservation and management practices.

Key words: Wetland, Geo-ecology, land use pattern, conservative plan.

Introduction

Wetlands are considered as the most productive ecosystems in the world which provide resources and different kind of services to the concerned human society (Khan, *et al.*, 2009, Millennium Ecosystem, 2005). It is important to note that although wetlands constitute 6 percent of the earth surface but it has the ability to produce 24 percent of the primary production (Goldie, 2001). The ever increasing population and limited natural resources has become difficult

to make decision towards uncontroversial landuse pattern (Katherine, 1990). Like any other natural entities wetlands have also been confronting growing pressure and threat from a variety of natural and man-made factors. During the recent period man-made factors have proved to be highly invasive and destructive towards the loss of wetland biodiversity. (Walker, *et al.* 1987). It is noteworthy that the conversion of wetlands for agricultural purpose is considered as the principal cause of wetland degradation (Dahl, 2000). Since