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# Peat Resources, Paleo-Environmental Interpretation as well as Their Utilization, Hakaluki Haor, Moulvibazar and Sylhet District, Bangladesh

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**Abstract :** The study area is the Hakaluki Haor which is the second largest wet land of Bangladesh. It spans over the districts of Moulvibazar and Sylhet in southeast Bangladesh. The study was focused in the exploration of peat reserve, reconstruction of the paleo-environment as well as the utilization of the peat resources. Peat is found randomly from 0.5 m to 7 m below the surface and 1 m to 11 m thickness at over 40 beels as well as small plain lands of 90 km2 area of Hakaluki Haor. The total reserve of peat is 282 million ton in wet condition and 112 million ton in dry condition. The peat deposits of Hakaluki Haor area is the largest peat reserves of the Bangladesh. Peat bearing Hakaluki Haor is a low-lying wet land which geological term is synclinal depression. It may be a syncline between two anticlines which was filled with sediments as well as various plant materials derived from the hilly region (anticline) on both sides (west and east) of the Haor. The transportation may be triggered by large natural disasters or any tectonic reason. On the other hand vegetation occurred in this depression as aquatic plants which might have been destroyed by large natural disasters or any tectonic reason. As environment dictates the characteristics and the source of sediments, various aspects of the sediment are indicators of the environment. Peat has mainly industrial importance as a fuel for power production, traditionally used for cooking, domestic heating and in brick fields, also used as insulator in many industries, agricultural purposes, retaining moisture in soil, raw material in horticulture and colour industries etc. Power plants of about 100 MW capacities may be established in this region based on peat of Hakaluki Haor which may be continued more than one hundred years.

**Keywords :** peat, pale environment, Hakaluki Haor, beel, syncline, anticline
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