IDENTIFICATION AND CHANGE DETECTION OF SPATIAL COVERAGE OF LULC, USING GEOSPATIAL TECHNOLOGY: A CASE STUDY OF AUSGRAM BLOCK, BURDWAN DISTRICT, WEST BENGAL, INDIA

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ABSTRACT

Land use refers to, "man's activities on land which are directly related to the land" (Clawson and Stewart, 1965)**.** Land cover refers to the bio-physical cover over the Earth's surface which includes water bodies, vegetation, bare soil, and artificial structures**.** Land use encompasses social and economic purposes to manage or alter land for agriculture, forestry and building construction including biogeochemistry, hydrology and biodiversity. Land use land cover (LULC) may be observed directly in the field or by remote sensing. Ausgram block is located in the east-central part of Burdwan distract of West Bengal. The district in general and the blocks in particular, have under gone several land use changes in the past century. The changing land use land cover scenarios of Ausgram Block were assessed using Remote Sensing and GIS techniques. The historic land use map has been prepared from of Survey of India topographic maps (1972). The land use and land cover maps of 2002 and 2008 were generated through the digital land use land cover classification of Land Sat 5 and 7 satellite imageries supported by ground truths. The results for three time periods revealed that agriculture is main land use land cover in this block. From 49 per cent land use land cover, agriculture increased marginally to 50.00 per cent in 2008. But forest and surface water bodies experienced decrease in the surface area coverage. As the forest and surface water bodies are two important ecologically sensitive land use land cover, specific care is necessary to prevent the decreasing trend of such resources to maintain the sustainability.

KEYWORDS: Spatial Coverage, Land Use Land Cover, Remote Sensing, GIS, Ground Truths