GIS LAB- A SHORT NOTE

The GIS cell was created in July 1999 and works under the direct supervision of the Conservator of Forests, Working Plan & GIS Circle at Kolkata. At present the work in the GIS laboratory on interpretation of satellite imageries is being carried out on desk top PCs, where an interdisciplinary approach is applied to by integrating satellite Remote Sensing; Geographic Information System (GIS) and GPS to solve specific problems of decision making in resource management. Satellite Remote Sensing techniques are used to generate spatial data on vegetation and land use types.

Thematic maps are used in forest management in the areas of yield regulation, growing stock perpetuity, increasing yield and revenue collection, wild life habitat conservation and preservation of forest areas, on steep slopes especially, for soil and moisture, watersheds in case of Green India Mission works, Forestry Intervention for Green Ganga in recent times and also for the afforestation works and related activities for the Japan International Cooperation Agency (JICA) funded Project in the State.

GIS as a decision support system is being used for detecting changes in vegetation cover, predicting the susceptibility of land to erosion, for suitability of timber harvest, identification of high-risk zones of forest fire incidents and preparing remedial measures.

West Bengal Forest Department initiated the Daily Forest Fire Alerts since 2007 to various Divisions in the State. The technique as implemented is quite successful as 99% of the forest fire alerts sent to different forest divisions were found to be correct and the feedback received confirmed the forest fire on the given location. A forest fire map for the State has been prepared for the fires that took place during the last three years.

The GIS Lab works and caters to the GIS / Remote Sensing needs for the forest areas with its in house latest equipments and hi-tech and modern softwares upgraded to most recent versions like ARC/INFO, ERDAS Image Processing Software, Autocad Map, ARC View etc. The GIS Lab also works in collaboration with Survey of India, Forest Survey of India, NRSC and other Government Institutions all over the country for generation of base maps, thematic layers, spatial distribution maps and other map digitization works as and when required.

BOUNDARY DEMARCATON & SURVEY OF FOREST AREAS