

PREFACE

The changing agricultural area is the result of the changes in the land use land cover of any area. There is an increase or decrease in the in one class result to the increase or decrease in the other land use land cover category. the changes in the agricultural area in the Damodar River basin comprised of the factor of the physical and human induced parameters. From the analysis of the physical cover, it has been observed that the area is covered by the barren land at great extent. This is the open area in the plateau region of the upper basin creating the difference between upper and lower basin area. The lower basin area is covered by the agricultural land. the regions of the plains in Bengal like Bardhaman, Hooghly, Howrah are the regions where agricultural lands are mostly concentrated. The changes in the agricultural area from the upper to lower basin is very much impacted by the surface irrigation availability. The surface water in terms of canal and tank irrigation, the regression coefficient shows strong impact of the canal irrigation on the agricultural land. The irrigation has also impacted the vegetation growth in the lower basin area. the suitability analysis of the agricultural area in the river basin shows the extended area suitable for cultivation in the basin area.