5.PREFACE

It is unquestionably true that since the turn of the millennium, in India's metropolises rapid increase in settlement and major city have intensified, getting the organic and natural and inorganic semi-natural environment at the edge of the city, and creating a zone with a distinctive atmosphere known as the urban climate. Such a climate—the outcome of a built environment—is distinctly different from the natural climate because concrete skyscrapers and paved surfaces peculiarly induce a different kind of insolation, cooling, and air drainage were lacking in green space, waterbodies, and open space cannot adequately accommodate with environmental rhythms, leading to the accumulation of heat and ecological derangement of subsurface soil It is quite evident that rapid urbanization industrialization has been continuously exerting pressure on the environment and because of which the nature is facing severe problem. With the help of GIS techniques, I have tried to demonstrate the effects of urbanization on green cover and water body is affecting the KMC area and because of which the environmental quality is deteriorating which leads to the severe loss of human life causing a threat to the nature. Within the 32-year period (1990-2022), a more pronounced shift in an urban area is discernible using all such appropriate technologies. The outcome demonstrates that accessibility, green cover, and built-up area are all changing at an increasing rate. Significant environmental damage is being done to the city because of these changes. As a result of the classification, proper land use strategy and monitoring of the environment are necessary for the sustained utilisation of these resources with the right environmental rhythm, leading to the buildup of heat and biological disturbance of underlying soil that is clearly predictable by GIS analysis.