PREFACE

Agriculture plays a vital role in the socio-economic development of any region, and the Pune district of Maharashtra is no exception. With its fertile soils, favorable climatic conditions, and abundant water resources, the district has emerged as a significant agricultural hub. Among the diverse range of crops cultivated in Pune, maize (maize crop) holds a prominent position. Maize cultivation in the region not only contributes to food security but also plays a crucial role in livestock feed production and various industrial applications.

In this project, the focus is on assessing the land suitability for maize crop cultivation in the Pune district. The utilization of geospatial technology provides an innovative approach to address the challenges and optimize the productivity of maize cultivation. By integrating spatial data, remote sensing imagery, and advanced analytical techniques, geospatial technology offers valuable insights into various factors that influence land suitability for maize crop.

One of the key advantages of geospatial technology is its ability to analyze and visualize spatial data related to soil characteristics, topography, climate, and land use patterns. This enables the identification of suitable areas within the district for maize cultivation based on factors such as soil fertility, drainage, temperature, precipitation, and slope. By considering these factors, farmers and agricultural planners can make informed decisions regarding site selection, land preparation, and crop management practices.