

## **Preface**

Cities all across the world continue to struggle with urban floods, and Kolkata, the capital of West Bengal, India, is no exception. Kolkata is vulnerable to frequent and severe flooding as a result of the complex combination of natural and human forces, including high rainfall, insufficient drainage infrastructure, and growing urbanization. In order to manage urban flooding effectively and be prepared for disasters in the city, accurate mapping of flood-prone areas is essential.

The potential of AHP and Google Earth Engine to support decision-making procedures involving vulnerability analysis, flood risk assessment, and the selection of mitigating measures. It delves into how to create comprehensive and inclusive flood control plans for Kolkata by integrating socioeconomic considerations, infrastructure data, and community involvement in the flood mapping process.