CHAPTER 5
CONCLUSION AND SUGGESTIONS

5.1. Conclusions

1. The near-annual occurrences of flood events were analyzed using remote sensing Sentinel-1 SAR products from 2021 to 2023 to determine their merit. While this method can be useful for detecting large flood events, it may have limitations in detecting more common flood events in roadways and neighborhoods, particularly in urban areas such as Paramaribo and Wanica, where accurately detecting and managing flood events is crucial.

2. This research aimed to generate a Coastal Flood Vulnerability Index (CFVI) for flood using a geospatial multi-criteria analysis approach based on exposure, sensitivity, and adaptive capacity components. The CFVI model equation incorporates various relevant flood disaster variables in a well-structured manner and can be further expanded for a more comprehensive and in-depth approach to assess flood vulnerability per district.

3. Furthermore, a flood mitigation strategy for the districts with the highest and second-highest Coastal Flood Vulnerability Index (CFVI) values is suggested through an integrated approach that combines a literature review and stakeholder feedback. Stakeholders have provided their insights and pinpointed areas that frequently experience flooding, thereby contributing to a flood mitigation strategy, which can assist in further follow-up analysis within the communities.

5.2. Suggestions

1. It is necessary to carry out research on strategy development based on the integration of various aspects