A Novel Automated Biodiversity Monitoring and Conservation Information System with Google Earth Engine

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Problem Statement

Natural disasters like earthquakes, drought, hurricanes, and floods have significantly contribute to biodiversity disturbance.

As a result, there's need to real time insights to policy makers.

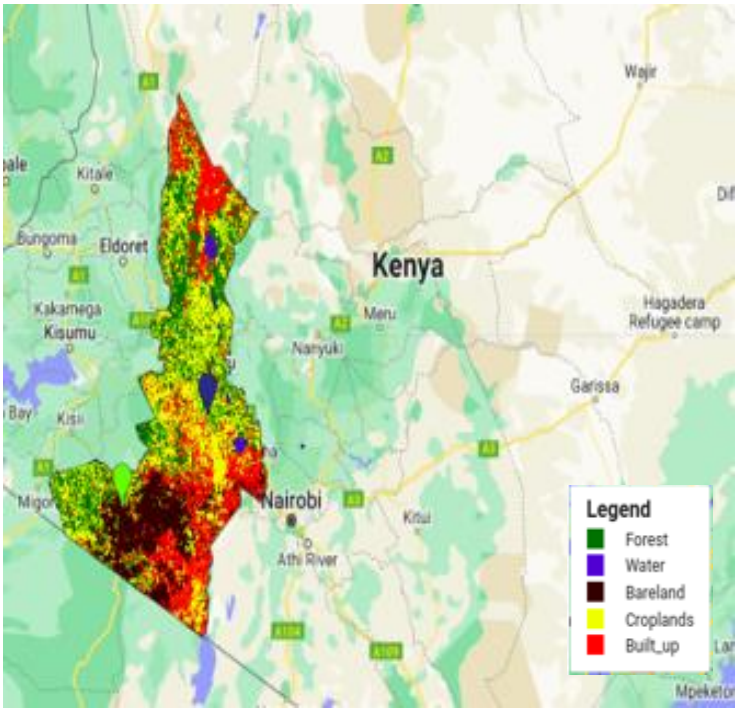
Google Earth Engine (GEE) App for real-time monitoring of biodiversity changes

Objectives

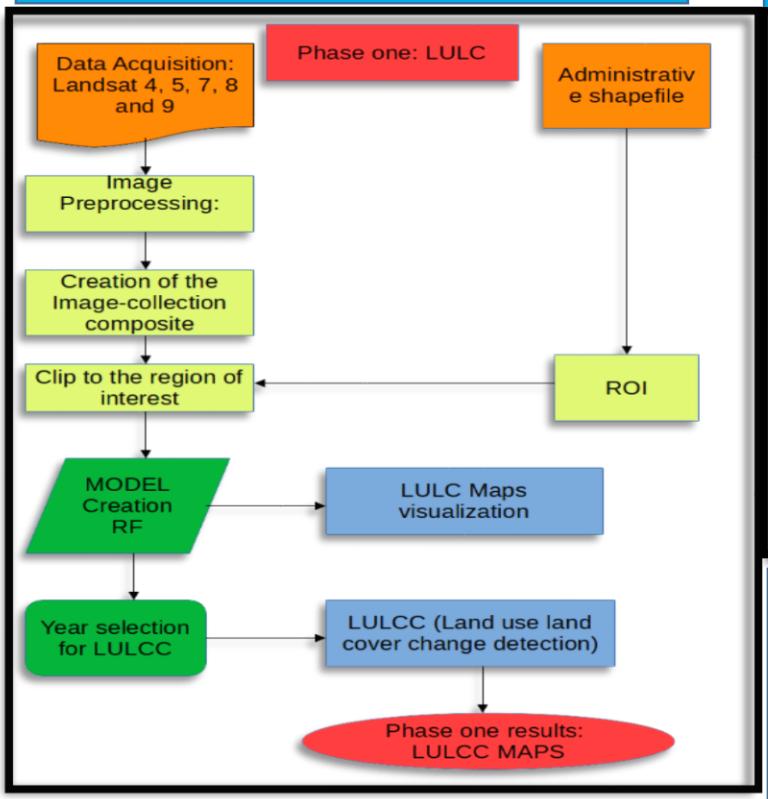
Automate Land Use Land Cover Change detection(LULCC) in GEE

1. Assess land use land cover disturbances
2. Predict the future LULC change

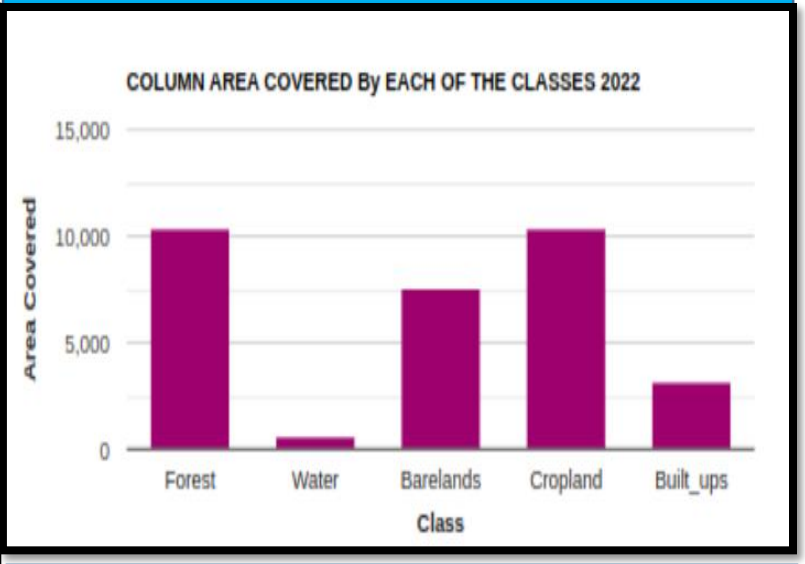
LULCC App Outputs



Methodology



Analysis of Land Cover Classifications



Future Works

1. Collaborate with relevant organizations to deploy the biodiversity monitoring tool into production
2. Enhance model performance accuracy for efficiency
3. Scale the tool to related study areas