

Project Update: January 2024

Activities carried out from April-December 2023:

1. *Identification and training of Ramogi Forest User Groups:*

We trained a total of 20 community members on forest monitoring and assessment including equipment use, data entry and interpretation. While 11 of the members were already part of RSG project the other nine were new and required refreshers on the need for forest monitoring and assessment.



Figure 1: Training sessions between community members on Forest Monitoring and Using Participatory GIS mobile data collection.

2. *Reconnaissance and preliminary study of the forest:*

With the trained 20 community members we carried out a reconnaissance of the forest and were able to set up different quadrats for monitoring while also using the previous ones. We digitally demarcated all the quadrats using GIS.

3. *Workshop for local communities and Ramogi Forest Working Group.*

We carried out two important workshops with a total of 42 participants. Important forest conservation stakeholders from Siaya County were invited and deliberations made on conservation of Ramogi Hill Forest and other habitats in the Lake Victoria Basin.

4. *Remote sensing through GIS cloud mobile data collection and satellite imagery*

Optical images from Landsat 8, and 9 (30m resolution) for 2013, 2018 and 2023 were downloaded from the system for earth observation, data access, processing and analysis for land monitoring (SEPAL). This is freely available at www.sepal.io. Supervised classification was employed to classify the images into two groups, forested areas and non-forested areas using the classification tool in the SEPAL platform. ArcMap 10.8 was used to calculate areas under each class. Change in areas for each land cover class over a period of 2013-2018 and 2018 -2023 was determined using Microsoft Excel.



Figure 2: a) Demarcation of quadrats and transects with the community. b) Workshop with key stakeholders.

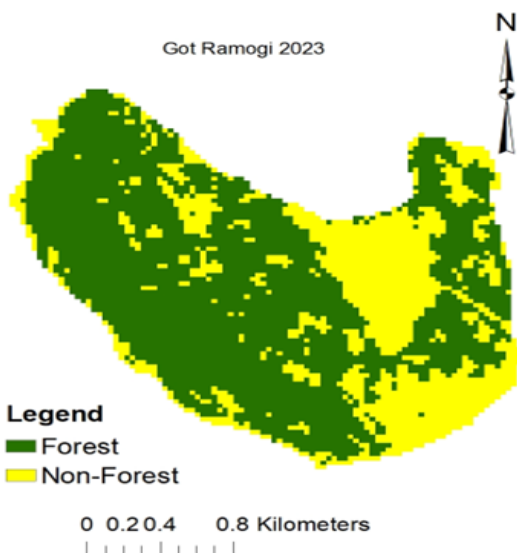
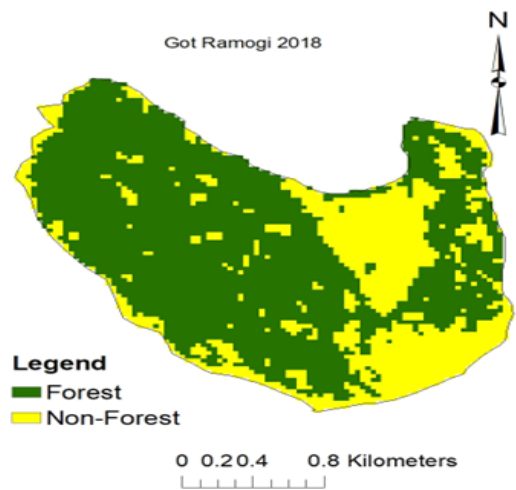
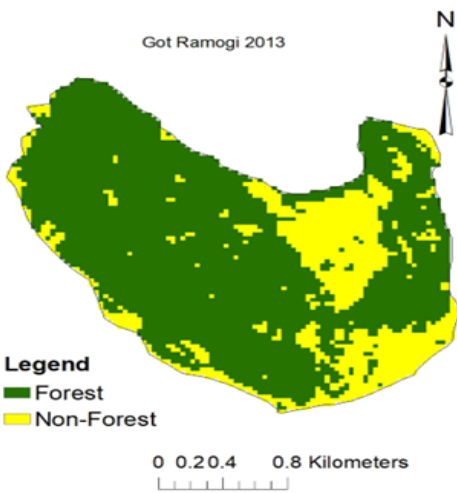


Figure 3: Maps showing the land cover change in Ramogi Forest from 2013-2023.

Table 1: Table showing Got Ramogi Land Cover from 2013-2023

Area in Hectares (ha)				
Year		2013	2018	2023
LULC Class	Forest	342.37	314.49	306.03
	Non-Forest	104.69	132.87	140.69

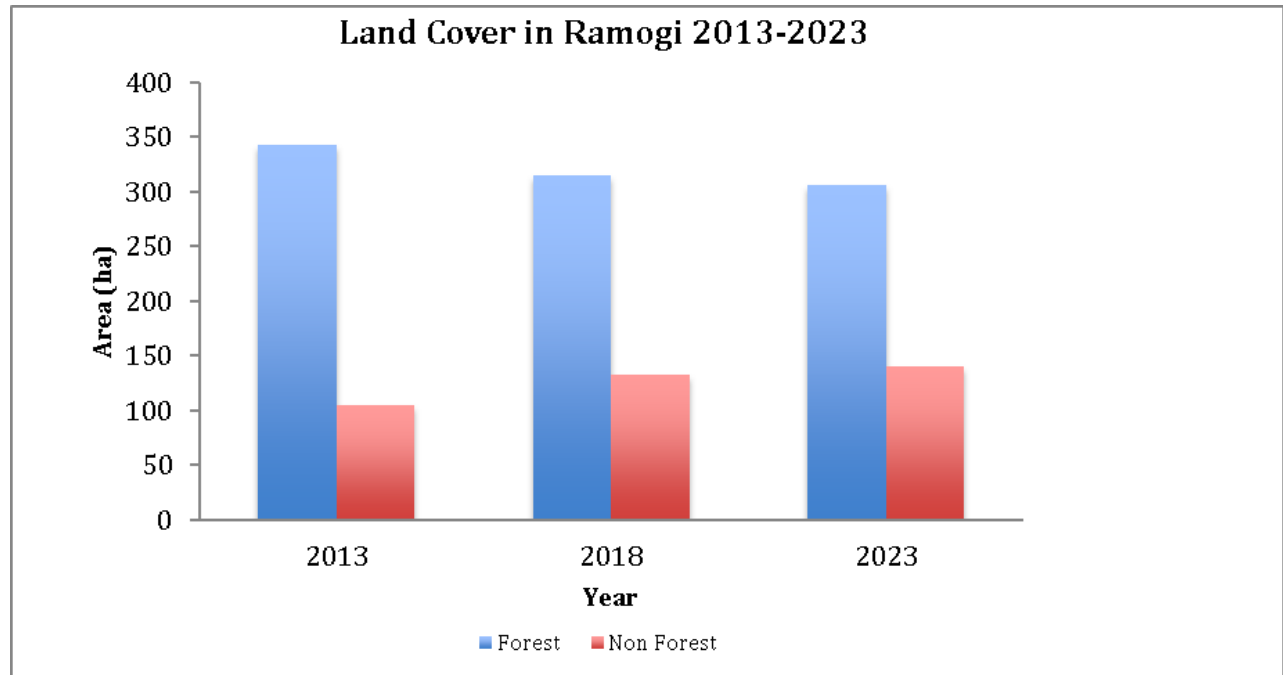


Figure 4: Land over (Forest and Non-Forested) area between 2013 and 2023.