

## ABSTRACT

Mau Forest in the Rift Valley in Kenya is the largest of the five major water towers in the country and also the largest indigenous montane forest in Eastern Africa. As such, the forest is an important natural resource base not only to the local economy but to the East African region at large. In spite of this, the forest has been highly degraded owing to immense anthropogenic pressure from the forest surrounding communities. The aim of this study was to assess the trends in forest cover and the driving forces leading to its change. Landsat TM images of 1984 and 1995, ETM+ of 2008, and OLI/TIRS of 2020 were used to depict the trend in forest cover for the period between 1984 and 2020. Focus Group Discussions (FGD) and in-depth interviews were also used to get the perceptions and experiences of the local people regarding the trend in forest cover and the associated driving forces. The results from the qualitative data were integrated with those of remote sensing for assessment of trend in forest cover. The study findings indicate a decline of 25.2% of forest cover within the Mau Forest complex in a period four years shy of four decades, amounting to approximately 699 km<sup>2</sup> of tree cover. This trend was fueled by an increasing demand for agricultural land where farmlands increased by 69.9%, as well as logging-legal or illegal-where grassland area increased by 37.2%. Three major drivers of forest cover change identified by the participants include human settlements, logging and expansion of farmlands. We recommend that forest policymakers and managers involve the local community, as the main stakeholders, in all levels of decision making and management so as to promote sustainable use of forest resources and improved management of the forest.