

## ABSTRACT

A research study was conducted in Mashuru Division of Kajiado District, Kenya with the objective of analyzing the types of vegetation degradation, their causes and their influence on rangeland condition and trend. The study was conducted through remote sensing tools, ground truthing, interviews, community workshop and literature. The results of the study showed that excessive use of the woody species by humans for woodfuel, building and fencing materials, medicine and ornamentals had led to the deterioration of the rangeland due to a loss of cover, change in plant composition and biodiversity. On the other hand, overgrazing and ecological succession of the grazing lands had led to further vegetation degradation in form of bush encroachment and thickening. These types of vegetation degradation have had an overall effect of loss of grass cover and hence loss of grazing capacity by livestock, especially cattle. The causes of vegetation decrease or increase over the last 30 years have been due to deforestation (trees and shrubs), bush encroachment and thickening, change in plant species composition and natural calamities such as droughts, wild fires and army worm invasions at various times. The overall results indicated that there has been a downward trend in range condition over the last 30 years which has affected the livestock productivity of the area.