

Abstract

In the arid and semiarid lands (ASAL) of Kenya, fuelwood and charcoal constitute 95–98% of the total energy demand for cooking, heating and lighting. The resultant deleterious ecological effects are severe and need urgent remedial interventions. A study was carried out in Marsabit District, which is a vast ASAL region, to examine the effects of woodfuel consumption on Marsabit Forest and the surrounding areas. It was found that wood for fuel harvested from Marsabit Forest was approximately 56,000 tons y^{-1} . The rate of deforestation was estimated at 1.6 ha y^{-1} . This resulted in great loss of indigenous biodiversity, destruction of vital ecosystems and habitats. To control further degradation of the forest, it is recommended that an immediate ban be imposed to stop harvesting of the indigenous species such as *Olea* spp. and *Teclea* spp., which are seriously endangered. Also, woodfuel conservation through wider and more efficient use of the improved energy-saving technologies should be enhanced.