

Abstract

The *Melia* (*Melia volkensii*, *Gurkii*) was being promoted in the drylands of Kenya as a source of wood biomass for domestic and commercial purposes. However, little was known about its profitability in smallholder production systems. This study established economic viability of *Melia* using net present value (NPV) and annual equivalent value (AEV) on data collected from 92 smallholder farmers and 20 processors/traders in four drylands districts of Kenya. Results showed that one hectare (ha) under *Melia* required an investment of US\$ 15,586 (discounted to 2010 prices) for a 10 year rotation cycle, covering tree establishment to timber production. Harvesting and processing jointly done together were the most expensive operations, contributing about 85% i.e US\$ 13,184 of total cost. Fencing, commonly done using tree branches, was the least expensive operation (0.1% of total cost). Profitability of *Melia* depended on extent of integration into existing farming systems, market outlets and level of value adding. The highest profitability was achieved when intercropped with green grams at initial stages of establishment accompanied with value adding into timber. In this situation, one ha of *Melia* stand gave NPV of US\$ 15,128 translating to a discounted annual profit margin of US\$ 2,055 for 10 years. Comparatively, profitability of *Melia* was higher than *Eucalyptus camaldulensis* and *Grevillea robusta* in a similar environment. Although *Melia* had economic and ecological benefits in drylands, product value addition was a prerequisite to realizing good returns.