

ABSTRACT

Little or no information and knowledge exists on the economic viability of *Jatropha curcas* for commercial bio-diesel production in Kenya. This study, therefore, applied internal rate of return (IRR) and gross margins (GM) to analyse the species economic potential using data collected through field surveys conducted in selected sites in Kenya. The sample units were selected using multistage stratified purposive sampling procedure to net those with high concentration of *Jatropha*. Production of *Jatropha* was observed to be under two distinct scenarios: pro-poor and large scale commercial. Profitability of *Jatropha* as a bio-fuel species was average. However, its production under intercropped conditions and as a large scale commercial venture had better results than either as a monocrop or under pro-poor conditions. The study, therefore, concludes that economic viability of *Jatropha* promotion for bio-diesel production in the country is low. Pro-poor *Jatropha* production is not economically viable in Kenya, irrespective of age of trees and level of integration into existing farming systems. However, better results could be derived when produced as an intercrop with good agronomic practices for enhanced yields coupled with post-harvest value addition.