ABSTRACT
Forests and trees are important natural resources globally. The reduction of forests and tree cover and the resulting loss of biodiversity, wildlife habitat, ecosystem integrity; increased climate variability and reduced crop yields, thus decrease in food security have become key development challenge. This trend can be reversed by promoting on-farm tree growing using quality tree seedlings. Community tree nurseries can provide this; however many are established but soon cease to operate. The reasons for such failures have not been documented. This study, premised on the theory of the firm sought mainly to evaluate the economic viability of such tree nurseries in Maseno Division, Kisumu County. The specific objectives were to: Understand the production processes; examine marketing strategies; and assess profitability. Conceptually, tree nursery profitability depends on tree seedling production processes; augmented by marketing strategies. Purposive sampling regime with a cross-sectional survey was used. A total of 54 tree nursery operators were interviewed. To triangulate the results ten closed tree nurseries; nine farmers growing trees and five key informants were interviewed. Pre-determined interview schedule was used to gather quantitative data on social demography; reasons for starting, location and size of tree nurseries; decisions on species and quantity of seedlings to produce; number of seedlings sold, given out, planted and remnants; estimated cost of production; pricing; records kept; and challenges. Qualitative data was collected through in-depth interviews and Focus Group Discussions guided by checklists. The quantitative data was analyzed and presented using descriptive statistics stating costs and benefits. The study established that 88.9% of the operators mainly use traditional production techniques resulting into high production costs. There is short market structure with product and sales orientation. A total of 53.7% of the operators are making losses, 35.2% producing below Break Even Point, and only 11.1% earn above the 52.2% average Return on Investment. Poor pricing and planning accounts for the losses as the average and marginal revenue are less than the price among those making losses. In conclusion, most of the tree nurseries are not economically viable. This can partly be overcome through training of the operators in tree nurseries as business enterprises. These findings can be valuable to tree nursery operators, policy regulators and research institutions in improving sustainable land, forest and environmental management at local, national and international levels especially Sub-Saharan region. The results can equally be used in responding to Sustainable Development Goals and climate change effects.