

ABSTRACT

Common beans (*Phaseolus vulgaris* L.) are important pulses for human nutrition for its edible seeds. Currently, the level of common bean production in Kenya is 0.67 t/ha. Common bean commercialization provides a pathway for improving productivity and food security. The current level of common bean commercialization is at 40% which is regarded low as farmers grow common beans as a subsistence crop which may not be economically sustainable. Subsistence farming is considered inefficient and may not be viable in ensuring food and income sufficiency in the long run. This study aimed at determining socio-economic, production and marketing factors influencing common bean commercialization in Chepalungu sub-county, Bomet County. The study adopted utility maximization theory and a descriptive research design. A cluster random sampling procedure was used to obtain a sample of 313 smallholder common bean farmers from a population of 1,440 common bean farmers. A semi-structured questionnaire was used to collect primary information on socio-economic characteristics (age, family size, level of education, gender and off-farm income), production factors (land, labor, inputs, capital), and marketing factors (marketing channels, distance to the market, market price, market information and marketing experience) influencing common bean commercialization among smallholder farmers. The collected data was analyzed using SPSS version 29 and STATA version 15 and econometric analysis was done using Stochastic frontier model, multiple regression model and Tobit model. Common bean productivity was measured using technical efficiency and the results from Stochastic frontier model indicated that the technical efficiency was 93.36%. These findings suggest that smallholder common bean farmers can increase current production by 6.64% by increasing their efficiency. Land under common beans, seeds and agrochemicals were significant at 1% and had a positive influence on the level of common bean productivity while family man days had a negative influence on the level of common bean production. The findings further show that distance to the market and farming experience increased technical inefficiencies by 0.68 and 0.24 units respectively. The level of common bean commercialization was 43.46 %. Multiple regression model shows that certified seeds and manure were significant at 1% while second generation seeds, planting fertilizer and hired labor were significant at 5% and positively influenced the level to common bean commercialization. Cropping systems negatively influenced common bean commercialization and was significant at 1% level. Tobit model shows that the quantity of common beans produced, marketing experience, distance to the market, farm gate marketing channel, land size and extension services positively affected common bean commercialization implying that a unit increase in these variables will lead to an increase in common bean commercialization while age and access to market information had significant negative effect at 1% and 5% respectively on commercialization implying that a unit increase in both variables will decrease level of common bean commercialization. The level of productivity was high (93.36%) showing that farmers are more efficient but the level of commercialization was low (43.46%), showing that majority of farmers do not participate in the market. Smallholder common bean farmers in Bomet County are advised to increase the land allotted to common beans, use certified seed and agrochemicals to increase productivity and commercialization. Policy makers are also encouraged to provide farmers with inputs and affordable farming credit so that farmers can afford improved seeds so as to increase common bean productivity which would in turn increase the level of commercialization.