DETERMINANTS OF SMALL SCALE BLACK PEPPER PRODUCTION IN KANDY DISTRICT: A CASE STUDY IN MEDADUMBARA DIVISIONAL SECRETARIAT DIVISION

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Black pepper is the second important spice crop in Sri Lanka. Despite of its importance, little is known about current productivity and factors affecting black pepper production / productivity. Therefore, this study was designed to identify socio economic and institutional factors, which influence productivity of black pepper and constraints faced by the producers. Multistage random sampling technique was used to select 100 small-scale black pepper farmers in Medadumbara Divisional Secretariat Division, Kandy district. Primary data were collected through a questionnaire survey. Data were analyzed using multiple linear regression analysis, Pearson's Chi-square test and Garret's constraint ranking technique. The regression results revealed that farming experience, frequency of extension visits and farm organization's meetings were positively and significantly$(p<0.05)$,while age of the farmer was negatively and significantly $(p<0.05)$ related with the black pepper productivity, indicating that older the farmer $(>45 years)$ lower the productivity. The multiple regression model$(R^2=0.86)$indicated that, these four factors explain 86% of the variation in productivity. The Pearson's Chi-square test revealed a significant association between productivity levels with farm characteristics like age and variety of the crop, cropping system and land suitability. Further, the constraint analysis revealed that price volatility, unfavorable whether at flowering stage, high cost of labour and poor marketing linkages were the major constraints in black pepper production. It can be concluded that productivity of black pepper in study area depends on farming experience, frequency of extension visits, farmer ganization's meetings and age of the farmer. Therefore, this study recommends initiating intensive farmer training programs through agricultural extension services. Furthermore, establishing a minimum price for black pepper and developing organized market network are paramount importance.

Keywords: Black pepper, Chi-square analysis, Constraints, Multiple linear regression