ESTIMATION OF FARM LEVEL TECHNICAL EFFICIENCY AND ITS SOCIO-ECONOMIC DETERMINANTS IN VANILLA PRODUCTION IN KANDY DISTRICT, SRI LANKA

A dissertation submitted to the
Faculty of Animal Science and Export Agriculture
Uva Wellassa University
In partial fulfillment of the requirements for the award of
Bachelor of Science in Export Agriculture

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2018

ABSTRACT

Vanilla is one of the economically important crops in Sri Lanka although it is mainly confined as a home garden crop grown in mid and low country wet zone. Farmer productivity is one of the most important concerns in vanilla cultivation. Thus, the productivity of Vanilla farmers can be raised by improvement in efficiency in the short run. As a result of the near absence of empirical information on farm-level technical efficiency in small scale Vanilla Production in the country generally and Kandy District in particular, a Stochastic Frontier function which incorporated inefficiency factors was estimated using a Maximum Likelihood technique to provide estimates of technical efficiency and its determinants using data obtained from 80 Vanilla farmers in Ganga Ihala Korale Divisional Secretariat division since it has one of the largest numbers of small-holder vanilla producers in the country. The results reveal that Vanilla farmers are not fully technically efficient and the mean technical efficiency estimated is 37.32%. Estimated results of the inefficiency model show that experience and educational level of the vanilla farmers significantly influence the farmers 'efficiency positively whereas age of the farmers contributes to increase the inefficiency. The findings imply that policies that would encourage youth to engage in vanilla farming and improvement in human capital should be made and implemented.

Key Words: Kandy District, Maximum Like hood estimation, Stochastic frontier model, Technical efficiency, Vanilla farmers