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“Filling gaps and removing traps  
for sustainable resource management”

## Farm Production and Market Access of Certified Coffee Farmers in Dak Lak, Vietnam

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### Abstract

Under the trend of market-oriented reform and industrialisation process, sustainable coffee farming provides opportunities for small-scale farmers to integrate successfully into the high-value markets. Most farmers understand the benefits of sustainable coffee production in term of providing bio-diverse farming practices, coffee agro-ecosystem, production risk mitigation, better product quality, and price premium. However, like many other agricultural sectors in Vietnam, several factors such as output maximisation behaviour, profit incentives, shortage of capital, traditional farming habits, and non-transparent markets make coffee farmers extremely vulnerable. Efficient production management and improved market access are vital. This study, therefore, attempts to analyse production efficiency and factors that influence market access of sustainable certified coffee farmers using stochastic frontier approach and seemingly unrelated regression (SUR) model. The results show that sustainable coffee farmers in Dak Lak obtained the average technical efficiency level of 88.24%. The technical efficiency ranged from 45.5% to 98.0%, hence sustainable coffee farmers could reach 9.97% of cost saving if they achieve the technical efficiency level of their most efficient counterparts. Certified coffee farmers are marketing their coffee beans to different markets of exporter/processor, buying agent, and local trader. Significant SUR estimated variables that influence certified coffee farmers' market access are transaction cost attributes (price uncertainty, market competition, transportation cost, payment speed, and sale agreement) and socioeconomic characteristics of farmer (age, ethnic, farming experience, location, and certificate ownership). Social relationships embedded in economic activities explain the most preferred access to spot markets of buying agent. The study suggests that improving education, credit access, and collective actions are essential for sustainable coffee farmers to mitigate the effect of small-scale production. Given the need for increased coordination, farmers should be engaged in more direct market channels.

**Keywords:** Certified coffee, market access, seemingly unrelated regression, stochastic frontier, technical efficiency