

INTISARI

Pengelolaan perkebunan kopi di Indonesia didominasi oleh petani kecil yang sebagian besar memiliki produktivitas dan kualitas yang rendah. Inefisiensi teknis serta risiko produksi merupakan salah satu penyebabnya. Sertifikasi kopi merupakan salah satu upaya untuk memastikan kualitas, keberlanjutan, serta keamanan produk yang dihasilkan. Penelitian ini bertujuan untuk menganalisis (1) efisiensi teknis usahatani kopi sertifikasi dan non-sertifikasi; (2) faktor-faktor produksi yang memengaruhi risiko produksi kopi sertifikasi dan non-sertifikasi; (3) perilaku petani kopi sertifikasi dan non-sertifikasi dalam menghadapi risiko produksi kopi; serta (5) faktor sosial ekonomi yang mempengaruhi perilaku petani dalam menghadapi risiko produksi kopi sertifikasi dan non-sertifikasi. Penelitian dilakukan di Kabupaten Lampung Barat tepatnya pada Kecamatan Batu Brak dan Way Tenong. Sensus sampling digunakan untuk memilih 60 petani kopi sertifikasi serta pada daerah yang sama dipilih secara purposive 60 petani kopi non-sertifikasi. Analisis efisiensi teknis dilakukan dengan menggunakan *Stochastic Production Function Cobb-Douglass* dengan alat analisis yaitu *Frontier 4.1*. Analisis faktor-faktor yang mempengaruhi risiko di analisis dengan fungsi produksi Cobb-Douglass dengan metode *Just and Pope*. Analisis perilaku terhadap risiko dilakukan dengan mengadopsi metode *Moscardi dan de Javny* dengan menghitung nilai $K_{(s)}$. Analisis faktor yang mempengaruhi perilaku petani terhadap risiko dilakukan dengan regresi logistik ordinal. Hasil analisis terhadap efisiensi teknis, didapatkan bahwa rata-rata tingkat efisiensi teknis usahatani kopi sertifikasi lebih tinggi dibandingkan usahatani kopi non-sertifikasi. Faktor-faktor yang mempengaruhi efisiensi teknis usahatani kopi sertifikasi yaitu umur petani, tingkat pendidikan, jumlah anggota keluarga, jarak lahan kerumah petani, pengalaman usahatani, umur kopi dan pendapatan *off-farm*, sedangkan usahatani kopi non-sertifikasi yaitu jarak lahan kerumah petani, pengalaman usahatani dan asal kepemilikan lahan. Hasil analisis faktor produksi terhadap risiko produksi didapatkan bahwa luas lahan dan pupuk organik menurunkan risiko produksi kopi sertifikasi (*risk-decreasing*), sedangkan tenaga kerja dan pupuk kimia meningkatkan risiko (*risk-increasing*). Pada usahatani kopi non-sertifikasi, luas lahan, pupuk organik dan pestisida menurunkan risiko produksi kopi (*risk-decreasing*). Perilaku petani terhadap risiko didapatkan bahwa sebesar 67% petani kopi sertifikasi bersikap menerima risiko (*risk-takers*), sedangkan petani kopi non-sertifikasi sebesar 48% bersikap menghindari risiko (*risk-averse*). Faktor perilaku petani terhadap risiko yang signifikan berpengaruh yaitu jumlah anggota keluarga, jarak lahan kerumah petani, pengalaman usahatani dan umur pohon kopi, sedangkan pada usahatani kopi non-sertifikasi faktor yang berpengaruh yaitu jumlah anggota keluarga dan pendapatan *off-farm*.

Kata Kunci: Sertifikasi kopi; efisiensi teknis; risiko produksi; perilaku risiko

ABSTRACT

Coffee plantation management in Indonesia is largely carried out by small-scale farmers who face challenges in terms of low productivity and quality. One of the main reasons for this is technical inefficiencies and production risks. To address these issues, coffee certification has been introduced as a means of ensuring the quality, sustainability, and safety of the coffee produced. The objective of this study is to analyze several key factors, including: (1) the technical efficiency of coffee farming among certified and non-certified farmers; (2) production factors that influence the risk of certified and non-certified coffee production; (3) the behavior of certified and non-certified coffee farmers in dealing with production risks; and (4) socio-economic factors that impact farmer behavior in relation to the risks of certified and non-certified coffee production. The research was conducted in West Lampung Regency, specifically in Batu Brak and Way Tenong Districts. Census sampling was used to select 60 certified coffee farmers, and an additional 60 non-certified coffee farmers were purposively selected from the same area. The Stochastic Production Function Cobb-Douglass was used for data analysis, with the analysis tool Frontier 4.1. The text appears to be discussing a study that analyzes the different factors that influence risk in an agricultural setting. The analysis was conducted using the Cobb-Douglas production function and the Just and Pope method. Additionally, the study analyzed risk behavior using the Moscardi and de Javnry method by calculating the $K_{(s)}$ value. To understand the factors that influence farmer behavior towards risk, the study used ordinal logistic regression. The results showed that certified coffee farms had a higher level of technical efficiency than non-certified coffee farms on average. The factors that influenced the technical efficiency of certified coffee farming included the farmer's age, education level, number of family members, distance from land to farmer's house, farming experience, age of coffee, and off-farm income. For non-certified coffee farming, the factors that influenced technical efficiency were distance from land to farmer's house, farming experience, and origin of land ownership. The analysis of production factors on production risk shows that certified coffee production is less risky with larger land area and the use of organic fertilizer, while it becomes riskier with the application of chemical fertilizers and increased labor. For non-certified coffee production, using larger land area, organic fertilizers, and pesticides reduces the risk. Farmers' risk-taking behavior varies between certified and non-certified coffee farmers, with 67% of certified coffee farmers being risk-takers and 48% of non-certified coffee farmers being risk-averse. Factors such as the number of family members, distance from the land to the farmer's house, farming experience, and age of coffee trees significantly influence farmers' behavior towards risk in certified coffee farming. In non-certified coffee farming, the number of family members and off-farm income are the major influencing factors.

Keywords: Coffee certification; technical efficiency; production risk; risk behavior