

**EFISIENSI DAN PERILAKU PETANI TERHADAP RISIKO  
PRODUKSI BAWANG PUTIH POLA TUMPANGSARI  
DI KABUPATEN KARANGANYAR**

Fattiyah Rahmawati<sup>1</sup>, Jamhari<sup>2</sup>

<sup>1</sup>Mahasiswa S2 Ekonomi Pertanian, Fakultas Pertanian Universitas Gadjah Mada

<sup>2</sup>Dosen Fakultas Pertanian Universitas Gadjah Mada

**INTISARI**

Penelitian ini bertujuan untuk mengetahui faktor yang mempengaruhi produksi bawang putih; mengetahui tingkat efisiensi teknis, alokatif dan ekonomi serta faktor-faktor yang mempengaruhi inefisiensi teknis; mengetahui risiko produksi; mengetahui perilaku petani terhadap risiko; mengetahui hubungan antara perilaku petani terhadap risiko dan efisiensi teknis bawang putih pola tumpangsari di Kabupaten Karanganyar. Metode analisis yang digunakan untuk mengetahui faktor-faktor yang mempengaruhi produksi adalah model analisis regresi linier berganda dengan metode OLS. Analisis efisiensi menggunakan analisis stokastik frontier dengan metode MLE. Analisis risiko menggunakan koefisien variasi, dan analisis perilaku petani terhadap risiko menggunakan metode Moscardi & de Janvry. Hasil penelitian menunjukkan bahwa produksi bawang putih pola tumpangsari di Kabupaten Karanganyar dipengaruhi secara positif oleh luas lahan dan jumlah benih, sedangkan variabel pestisida cair berpengaruh negatif. Usahatani bawang putih pola tumpangsari di Kabupaten Karanganyar belum efisien secara teknis, ekonomi maupun alokatif. Faktor-faktor yang dapat menurunkan tingkat inefisiensi teknis produksi bawang putih pola tumpangsari, yaitu umur, pengalaman dan pelatihan. Faktor yang dapat menurunkan tingkat inefisiensi biaya yaitu pelatihan, sedangkan pendidikan petani meningkatkan inefisiensi biaya. Risiko produksi usahatani bawang putih pola tumpangsari di Kabupaten Karanganyar memiliki variasi 59,94%. Petani bawang putih di Kabupaten Karanganyar sebagian besar (58,33%) berperilaku enggan terhadap risiko (*risk averter*), sedangkan 41,67 persen lainnya berperilaku netral terhadap risiko (*risk neutral*). Tidak terdapat korelasi antara perilaku petani terhadap risiko dan tingkat efisiensi teknis.

Kata Kunci: bawang putih, efisiensi, frontier stokastik, perilaku petani terhadap risiko, risiko

**EFFICIENCY AND FARMER'S ATTITUDE TOWARD RISK  
OF GARLIC PRODUCTION WITH INTERCROPPING PATTERN  
IN KARANGANYAR REGENCY**

Fattiyah Rahmawati<sup>1</sup>, Jamhari<sup>2</sup>

<sup>1</sup>Master Students in Agricultural Economics, Faculty of Agriculture, Universitas  
Gadjah Mada

<sup>2</sup>Lecturer of Faculty of Agriculture, Universitas Gadjah Mada

**ABSTRACT**

*This study aimed to determine the factors that affect garlic production; estimate the level of technical, allocative and economic efficiency and the factors that affect technical inefficiency; determine production risk; determine farmer's attitude towards risks; determine the relationship between farmer's attitude towards risk and technical efficiency of garlic production with intercropping patterns in Karanganyar Regency. Multiple linear regression analysis model with the OLS method was used to determine the factors that affect the garlic production. Efficiency was analyzed using frontier stochastic analysis with the MLE method. Production risk was analyzed using the coefficient of variation, and farmer's attitude towards risk was analyzed using the Moscardi & de Janvry method. The results showed that the garlic production with intercropping pattern in Karanganyar Regency was positively affected by land area and seeds, while the liquid pesticide variable had a negative effect. Garlic production with intercropping patterns in Karanganyar Regency had not been technically, economically and allocatively efficient. The factors that could reduced the level of technical inefficiency in garlic production with intercropping patterns were age, experience and training. Training reduced the level of cost inefficiency, while farmer education increased the level of cost inefficiency. The risk of garlic production with intercropping pattern in Karanganyar Regency had 59,94% in variation. Most garlic farmers in Karanganyar Regency (58,33%) were risk averter, and 41,67% were risk neutral. There was no correlation between farmer's attitude toward risk and the level of technical efficiency.*

*Keywords: garlic, efficiency, stochastic frontier, farmer's attitude toward risk, risk.*