



## INTISARI

Penelitian ini bertujuan untuk mengetahui (1) faktor-faktor yang mempengaruhi produksi Padi Melati Menoreh di Kabupaten Kulon Progo, (2) kondisi *Return to Scale* (RTS) usahatani Padi Melati Menoreh di Kabupaten Kulon Progo, (3) tingkat efisiensi teknis usahatani Padi Melati Menoreh di Kabupaten Kulon Progo, (4) faktor-faktor yang mempengaruhi inefisiensi teknis usahatani Padi Melati Menoreh di Kabupaten Kulon Progo, serta (5) kelayakan usahatani Padi Melati Menoreh di Kabupaten Kulon Progo. Penelitian dilakukan di Kalurahan Banjararum dan Banjarharjo, Kapanewon Kalibawang serta Kalurahan Wijimulyo dan Banyuroto, Kapanewon Nanggulan Kabupaten Kulon Progo dengan jumlah responden 60 petani. Metode pengambilan sampel menggunakan metode *snowball sampling*. Analisis faktor-faktor yang mempengaruhi produksi usahatani Padi Melati Menoreh dilakukan menggunakan fungsi produksi Cobb-Douglas dengan estimasi metode *Ordinary Least Squares* (OLS) dengan Program SPSS 25. Analisis *Return to Scale* dilakukan melalui penjumlahan seluruh koefisien variabel bebas yang menunjukkan elastisitas produksi hasil pendugaan parameter dengan menggunakan fungsi produksi Cobb-Douglas metode OLS. Analisis efisiensi teknis dan sumber-sumber inefisiensi teknis usahatani Padi Melati Menoreh menggunakan Fungsi Produksi Stochastic Frontier tipe Cobb-Douglas secara simultan dengan Program Frontier 4.1.c metode *Maksimum Likelihood Estimation* (MLE). Analisis kelayakan usahatani Padi Melati Menoreh dilakukan dengan analisis biaya total, penerimaan total, pendapatan, dan analisis kelayakan usahatani (R/C). Hasil penelitian menunjukkan bahwa faktor-faktor yang berpengaruh secara positif terhadap produksi Padi Melati Menoreh yaitu luas lahan tanam, tenaga kerja, pupuk TSP dan agensia pengendali hayati; sedangkan pupuk kandang organik, pupuk Urea dan pestisida cair berpengaruh secara negatif terhadap produksi Padi Melati Menoreh. Usahatani Padi Melati Menoreh di Kabupaten Kulon Progo masuk dalam kategori Decreasing Return to Scale dengan nilai RTS sebesar 0,479. Usahatani Padi Melati Menoreh belum efisien secara teknis dengan nilai rata-rata efisiensi teknis sebesar 0,681. Faktor-faktor yang berpengaruh secara negatif terhadap inefisiensi teknis usahatani Padi Melati Menoreh yaitu akses permodalan/kredit dan sistem tanam; sedangkan pengalaman berusahatani Padi Melati Menoreh dan sumber benih berpengaruh secara positif terhadap inefisiensi teknis usahatani Padi Melati Menoreh. Usahatani Padi Melati Menoreh di Kabupaten Kulon Progo berada dalam kategori layak diusahakan dengan nilai R/C total sebesar 1,21 dan R/C eksplisit sebesar 1,92. Efisiensi teknis usahatani Padi Melati Menoreh memiliki korelasi dengan produksi dan pendapatan usahatani, namun tidak memiliki korelasi dengan keuntungan dan kelayakan usahatani.

Kata kunci: efisiensi teknis, inefisiensi teknis, Kabupaten Kulon Progo, kelayakan usahatani, Padi Melati Menoreh



## ABSTRACT

This research aims to determine (1) the factors that influence the production of Melati Menoreh Rice in Kulon Progo Regency, (2) the *Return to Scale* (RTS) conditions of Melati Menoreh Rice farming in Kulon Progo Regency, (3) the level of technical efficiency of Melati Menoreh Rice farming in Kulon Progo Regency, (4) factors that influence the technical inefficiency of Melati Menoreh Rice farming in Kulon Progo Regency, and (5) feasibility of Melati Menoreh Rice farming in Kulon Progo Regency. The research was conducted in Banjararum and Banjarharjo Villages, Kalibawang Sub-district and Wijimulyo and Banyuroto Villages, Nanggulan Sub-district, Kulon Progo Regency with a total of 60 farmers as respondents. The sampling method uses *the snowball sampling* method. Analysis of factors influencing the production of Melati Menoreh Rice farming was carried out using the Cobb-Douglas production function with *Ordinary Least Squares* (OLS) estimation method with the SPSS 25 Program. *Return to Scale* analysis was carried out by adding up all the independent variable coefficients which show the elasticity of production resulting from parameter estimation using Cobb-Douglas production function with OLS method. Analysis of technical efficiency and sources of technical inefficiency in Melati Menoreh Rice farming using the Cobb-Douglas type Stochastic Frontier Production Function simultaneously with the Frontier Program 4.1.c *Maximum Likelihood Estimation* (MLE) method. The Melati Menoreh Rice farming feasibility analysis was carried out by total cost analysis, total revenues, income, and farming feasibility analysis (R/C). The research results show that the factors that have a positive influence on the production of Melati Menoreh Rice are the area of planting land, labor, TSP fertilizer and biological control agents; Meanwhile, organic manure, urea fertilizer and liquid pesticides have a negative effect on Melati Menoreh Rice production. Melati Menoreh Rice Farming in Kulon Progo Regency is included in the Decreasing Return to Scale category with an RTS value of 0.479. Melati Menoreh Rice Farming is not yet technically efficient with an average technical efficiency value of 0.681. Factors that negatively influence the technical inefficiency of Melati Menoreh Rice farming are access to capital/credit and planting systems; Meanwhile, Melati Menoreh Rice farming experience and seed sources have a positive influence on the technical inefficiency of Melati Menoreh Rice farming. Melati Menoreh Rice Farming in Kulon Progo Regency is in the feasible category with a total R/C value of 1.21 and an explicit R/C of 1.92. The technical efficiency of Melati Menoreh Rice farming has a correlation with production and farming income, but does not have a correlation with profit and feasibility of farming.

Key words: technical efficiency, technical inefficiency, Kulon Progo Regency, farming feasibility, Melati Menoreh Rice