



INTISARI

Tingkat ketergantungan petani Indonesia terhadap pupuk anorganik dan penggunaan bahan kimia untuk pengendalian OPT sangat tinggi. Salah satu cara untuk mengatasi ketergantungan petani terhadap bahan kimia yaitu dengan menerapkan sistem pertanian berkelanjutan dengan pertanian organik. Kabupaten Bondowoso merupakan salah satu wilayah di Jawa Timur yang mengembangkan padi organik dari tahun 2009. Penting untuk mengetahui status keberlanjutan usahatani padi melihat pentingnya program pertanian organik yang dapat memperbaiki kerusakan lingkungan akibat penerapan pertanian konvensional. Tujuan dari penelitian ini yaitu (1) membandingkan produktivitas dan faktor-faktor yang mempengaruhi produksi padi organik dan non organik, (2) membandingkan pendapatan usahatani padi organik dan non organik, (3) membandingkan tingkat status keberlanjutan usahatani padi organik dan non organik, (4) merumuskan indikator kunci yang paling dominan terhadap keberlanjutan usahatani padi organik dan non organik. Lokasi penelitian ditentukan secara purposive di tiga kecamatan di Kabupaten Bondowoso. Sampel ditentukan dengan *proportionate non probabilistic sampling*. Data dikumpulkan melalui wawancara terhadap 158 petani, dengan 64 petani organik dan 94 petani non organik. Analisis yang digunakan yaitu *independent t-test*, *Ordinary Least Square (OLS)*, dan *Multidimensional Scaling (MDS)*. Berdasarkan hasil penelitian diketahui bahwa produktivitas padi organik lebih tinggi dibandingkan padi non organik. Peningkatan penggunaan input luas lahan, tenaga kerja, dan penggunaan pupuk urea, penggunaan pupuk SP-36 serta pengurangan penggunaan input benih akan meningkatkan produksi padi non organik. Peningkatan input luas lahan, benih, tenaga kerja, pestisida organik akan meningkatkan produksi padi organik. Penerapan usahatani padi organik mampu menurunkan biaya produksi, serta meningkatkan penerimaan dan pendapatan, dan uji statistik menunjukkan bahwa pendapatan usahatani padi organik lebih tinggi dibandingkan dengan pendapatan usahatani padi non organik. Hasil ordinasasi Rap-Rice dengan metode MDS menunjukkan bahwa indeks keberlanjutan usahatani padi organik lebih tinggi daripada keberlanjutan usahatani padi non organik. Status keberlanjutan usahatani padi organik masuk dalam kategori sangat berkelanjutan, sedangkan, status keberlanjutan usahatani padi non organik termasuk dalam kategori kurang berkelanjutan. Indikator kunci keberlanjutan usahatani padi organik pada dimensi ekonomi (permodalan usahatani), sosial (tingkat pendidikan), lingkungan (Luas Lahan), kelembagaan (adanya pertemuan kelompok tani), dan teknologi (Adopsi teknologi oleh petani). Indikator kunci keberlanjutan usahatani padi non organik pada dimensi ekonomi (permodalan usahatani), sosial (pengalaman usahatani), lingkungan (kondisi tanah/kesesuaian lahan untuk padi), kelembagaan (intensitas konflik antar anggota kelompok tani), dan teknologi (adopsi teknologi oleh petani).

Kata Kunci: Keberlanjutan, Padi Organik, Non Organik, Multidimensional Scaling, Bondowoso

ABSTRAK

The level of dependence of Indonesian farmers on inorganic fertilizers and the use of chemicals for pest control is very high. One way to address this dependence on chemicals is by implementing sustainable agriculture through organic farming. Bondowoso Regency, located in East Java, has been developing organic rice since 2009. It is important to assess the sustainability status of rice farming, considering the significance of organic farming programs that can mitigate environmental damage caused by conventional farming practices. The objectives of this study are: (1) to compare the productivity and factors affecting the production of organic and non-organic rice, (2) to compare the income of organic and non-organic rice farming, (3) to compare the sustainability status of organic and non-organic rice farming, (4) to identify the most dominant key indicators of sustainability for both organic and non-organic rice farming. The research location was purposively selected in three districts of Bondowoso Regency. The sample was determined using proportionate non probabilistic sampling. Data was collected through interviews with 158 farmers, consisting of 64 organic farmers and 94 non-organic farmers. The analyses used were independent t-test, Ordinary Least Squares (OLS), and Multidimensional Scaling (MDS). The results of the study show that the productivity of organic rice is higher than that of non-organic rice. The increase in input use, such as land area, labor, and urea fertilizer, SP-36 fertilizer as well as a reduction in seed usage, will increase the production of non-organic rice. Meanwhile, the increase in input use, such as land area, seeds, labor, and organic pesticides, will increase the production of organic rice. The implementation of organic rice farming reduces production costs while increasing revenue and income. Statistical tests show that the income from organic rice farming is higher than that from non-organic rice farming. The Rap-Rice ordination results using the MDS method indicate that the sustainability index of organic rice farming is higher than that of non-organic rice farming. The sustainability status of organic rice farming is categorized as “good sustainable”, while the sustainability status of non-organic rice farming is categorized as “less sustainable”. The key sustainability indicators of organic rice farming include the economic dimension (farm capital), social dimension (education level), environmental dimension (land area), institutional dimension (presence of farmer group meetings), and technological dimension (technology adoption by farmers). Meanwhile, the key sustainability indicators of non-organic rice farming include the economic dimension (farm capital), social dimension (farming experience), environmental dimension (soil condition/suitability for rice cultivation), institutional dimension (intensity of conflicts among farmer group members), and technological dimension (technology adoption by farmers).

Keywords: Sustainability, Organic Rice, Non-Organic Rice, Multidimensional Scaling, Bondowoso