

RINGKASAN

Faizal Djafrihansah, 250811100024 Program Magister Pengelolaan Sumber Daya Alam, Program Pascasarjana Universitas Trunojoyo Madura, Bangkalan, 19 Juni 2026, “Evaluasi Dampak Program Sekolah Lapang Pengelolaan Tanaman Terpadu terhadap Keberlanjutan Usahatani Padi di Kabupaten Sumenep: Perspektif Ekonomi, Sosial dan Lingkungan”, Komisi Pembimbing, Ketua Dr. Teti Sugiarti, M.Si Anggota Dr. Agr. Eko Setiawan, S.P., M.Si.

Sekolah Lapang Pengelolaan Tanaman Terpadu (SLPTT) merupakan pendekatan pembelajaran partisipatif yang dirancang untuk meningkatkan kemampuan petani dalam menerapkan teknologi usahatani secara efektif sesuai dengan kondisi spesifik lokasi. Keberhasilan SLPTT sebagai program peningkatan kapasitas petani tidak cukup diukur dari tercapai atau tidaknya peningkatan produktivitas padi. Peningkatan hasil panen dapat bersifat sementara apabila tidak diikuti dengan peningkatan pendapatan petani, efisiensi biaya produksi, penguatan kapasitas sosial dan kelembagaan, kemandirian petani dalam pengambilan keputusan, serta penerapan praktik budidaya yang ramah lingkungan.

Penelitian menggunakan pendekatan kuantitatif dengan desain evaluatif *before-after* retrospektif. Lokasi penelitian mencakup empat kecamatan, yaitu Ambuntan, Ganding, Manding, dan Kota Sumenep, dengan jumlah responden sebanyak 120 petani peserta SLPTT. Data dikumpulkan melalui kuesioner, wawancara, observasi, dokumentasi, catatan kelompok tani, dan verifikasi penyuluh. Analisis data dilakukan secara deskriptif dan menggunakan *Structural Equation Modeling–Partial Least Squares* (SEM-PLS).

Hasil penelitian menunjukkan bahwa pelaksanaan SLPTT berjalan baik dengan capaian implementasi tinggi hingga sangat tinggi. Skor rata-rata sosialisasi sebesar 4,63, peran penyuluh 4,56, konsistensi sekolah lapang 4,50, efektivitas pembelajaran 4,25, dan rembuk tani 4,13. Pengetahuan petani meningkat sebesar 112% di Kota Sumenep, 87% di Ambuntan, 41% di Ganding, dan 30% di Manding.

Program SLPTT mendorong perubahan praktik usahatani. Penggunaan pupuk organik meningkat dari 96,42 kg/ha menjadi 323,08 kg/ha, pupuk urea menurun dari 324,13 kg/ha menjadi 217,69 kg/ha, dan pestisida kimia menurun dari 5,09 liter/ha menjadi 3,84 liter/ha. Produktivitas padi meningkat dari 53,09 ku/ha menjadi 64,09 ku/ha, pendapatan naik dari Rp23,06 juta menjadi Rp31,84 juta, sedangkan biaya produksi menurun sekitar 5,40%.

Hasil SEM-PLS menunjukkan bahwa SLPTT berpengaruh signifikan terhadap dimensi ekonomi, sosial, dan lingkungan. Namun, keberlanjutan usahatani terutama dipengaruhi oleh dimensi lingkungan dengan koefisien 0,540 dan ekonomi sebesar 0,504, sedangkan dimensi sosial tidak berpengaruh signifikan. Nilai R-square keberlanjutan sebesar 0,830 menunjukkan bahwa model mampu menjelaskan 83,0% variasi keberlanjutan usahatani padi.

Faktor yang mendukung keberlanjutan penerapan hasil SLPTT antara lain dukungan kelembagaan dari BPP dan Dinas Pertanian, tingginya antusiasme petani dalam mengikuti pembelajaran lapang, kesesuaian teknologi dengan kondisi agroekosistem setempat, serta keterlibatan aktif penyuluh dan tokoh tani. Di sisi

lain, faktor penghambat meliputi potensi menurunnya motivasi petani setelah program berakhir, keterbatasan akses terhadap sarana produksi alternatif, anggapan bahwa SLPTT hanya merupakan kegiatan proyek sementara, serta ketergantungan sebagian petani terhadap bantuan program.

Secara keseluruhan, penelitian ini menyimpulkan bahwa Program SLPTT memberikan kontribusi yang signifikan terhadap keberlanjutan usahatani padi di Kabupaten Sumenep. Kontribusi tersebut terutama terjadi melalui peningkatan efisiensi ekonomi dan penerapan praktik budidaya yang lebih ramah lingkungan. Oleh karena itu, keberlanjutan Program SLPTT perlu didukung melalui pendampingan setelah program selesai, penguatan kelembagaan petani, peningkatan akses terhadap input ramah lingkungan, serta kebijakan pertanian yang berorientasi pada efisiensi ekonomi dan keberlanjutan lingkungan.

Kata Kunci: *Keberlanjutan Pertanian, Penyuluhan Pertanian, SLPTT, SEM-PLS, Usahatani Padi*

SUMMARY

Faizal Djafrihansah, 250811100024, Master's Program in Natural Resource Management, Graduate Program, Trunojoyo University of Madura, Bangkalan, June 19, 2026. "Evaluation of the Impact of the Integrated Crop Management Farmer Field School Program on the Sustainability of Rice Farming in Sumenep Regency: Economic, Social, and Environmental Perspectives", Advisory Committee: Chair, Dr. Teti Sugiarti, M.Si.; Member, Dr. Agr. Eko Setiawan, S.P., M.Si.

Integrated Crop Management Farmer Field School (SLPTT) is a participatory learning approach designed to improve farmers' ability to apply farming technologies effectively according to site-specific conditions. The success of SLPTT as a farmer capacity-building program cannot be measured solely by whether rice productivity increases. Higher yields may only be temporary if they are not followed by improvements in farmers' income, production cost efficiency, social and institutional capacity, farmers' independence in decision-making, and the adoption of environmentally friendly cultivation practices.

This study employed a quantitative approach with a retrospective before-after evaluative design. The research was conducted in four subdistricts, namely Ambunten, Ganding, Manding, and Kota Sumenep, involving 120 rice farmers who participated in the SLPTT program. Data were collected through questionnaires, interviews, field observations, documentation, farmer group records, and verification by agricultural extension officers. Data were analyzed descriptively and using Structural Equation Modeling–Partial Least Squares (SEM-PLS).

The results show that the implementation of SLPTT was generally good, with implementation achievements ranging from high to very high. The average score for program socialization was 4.63, followed by the role of extension officers at 4.56, the consistency of field school implementation at 4.50, learning effectiveness at 4.25, and farmer deliberation meetings at 4.13. Farmers' knowledge increased by 112% in Kota Sumenep, 87% in Ambunten, 41% in Ganding, and 30% in Manding.

The SLPTT program encouraged changes in rice farming practices. The use of organic fertilizer increased from 96.42 kg/ha to 323.08 kg/ha, while urea fertilizer use decreased from 324.13 kg/ha to 217.69 kg/ha. The use of chemical pesticides also decreased from 5.09 liters/ha to 3.84 liters/ha. Rice productivity increased from 53.09 quintals/ha to 64.09 quintals/ha, and farmers' income rose from IDR 23.06 million to IDR 31.84 million, while production costs decreased by approximately 5.40%.

The SEM-PLS results indicate that SLPTT had a significant effect on the economic, social, and environmental dimensions. However, rice farming sustainability was mainly influenced by the environmental dimension, with a coefficient of 0.540, and the economic dimension, with a coefficient of 0.504, while the social dimension did not show a significant effect. The R-square value for sustainability was 0.830, indicating that the model was able to explain 83.0% of the variation in rice farming sustainability.

The factors supporting the sustainability of SLPTT outcomes include institutional support from the Agricultural Extension Center (BPP) and the Agricultural Office, farmers' high enthusiasm for field-based learning, the suitability of technologies to local agroecosystem conditions, and the active involvement of extension officers and farmer leaders. Meanwhile, the inhibiting factors include the potential decline in farmers' motivation after the program ends, limited access to alternative production inputs, the perception that SLPTT is only a temporary project-based activity, and some farmers' dependence on program assistance.

Overall, this study concludes that the SLPTT program makes a significant contribution to the sustainability of rice farming in Sumenep Regency. This contribution mainly occurs through improved economic efficiency and the adoption of more environmentally friendly cultivation practices. Therefore, the sustainability of the SLPTT program needs to be supported through post-program assistance, strengthening of farmer institutions, improved access to environmentally friendly inputs, and agricultural policies oriented toward economic efficiency and environmental sustainability.

Keywords: *Agricultural Extension, Agricultural Sustainability, Rice Farming, SEM-PLS, SLPTT.*