

Is Organic Farming Socially Profitable? Evidence from Northeast Thailand

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Abstract:

While organic farming (OF) has gained traction globally from the environmental and health perspectives, the dissemination remains stagnant presumably due to the economic incentive incompatibility. This study examines the impact of OF on the private and social economic profits of jasmine and sticky rice farming households in northeast Thailand. A field survey of 300 households from 18 organized farmer groups (six export-standard organic farming [ES-OF], six domestic-standard organic farming [DS-OF], and six Good Agricultural Practices [GAP]) and non-organized control groups was conducted. The study distinguishes between private and social costs, imputing family labor costs, and the data were analyzed by the fixed-effect regression utilizing the dual rice structure and the matching algorithms. Results show that ES-OF significantly increases private profits (+USD 18.2/ha) but not social profits, while DS-OF positively impacts both private (+USD 36.2/ha) and social profits (+USD 30.7/ha). GAP also has positive effects on both private (+USD 21.8/ha) and social profits (+USD 17.6/ha). The labor-intensive transplanting practice increases output value (+USD 17.0/ha) but reduces both private (-USD 17.7/ha) and social profits (-USD 22.8/ha). These findings suggest that ES-OF is economically unsustainable without internalizing external costs such as certification, whereas DS-OF is viable and should be promoted with enhanced extension efforts.

Keywords:

Fixed effect, good agricultural practice (GAP), jasmine rice, organic farming certification, propensity score matching, random effect, social profit, sticky rice.