

ABSTRACT

Traditional markets are public facilities serving economic and social functions and require efficient resource management. This study examines technical efficiency and returns to scale in 22 traditional markets in Purworejo Regency during 2022-2024. Benchmark, slack, target, and robustness analyses use 2024 data.

The study employs input-oriented Data Envelopment Analysis (DEA). The BCC model under Variable Returns to Scale (VRS) estimates Pure Technical Efficiency (PTE), while the CCR model under Constant Returns to Scale (CRS) estimates Overall Technical Efficiency (OTE); Scale Efficiency (SE) equals OTE/PTE. Inputs include kiosks, stalls (los), trading spaces (selasar), and active traders; output is realized market levy revenue.

Mean PTE scores for 2022-2024 are 0.6955, 0.7159, and 0.7325; OTE scores are 0.4157, 0.4527, and 0.4636; and SE scores are 0.6030, 0.6300, and 0.6314. Increasing Returns to Scale (IRS) applies to 19 markets in 2022, 18 in 2023, and 20 in 2024. Baledono and Grabag consistently achieve PTE, OTE, and SE of 1.0000 under CRS. In 2024, Grabag and Lugosobo are the most frequent benchmarks, while active traders and trading spaces record the most frequent input slacks. Robustness tests indicate stable results. Input targets are mathematical projections onto the relative frontier, not direct input-reduction recommendations.

Keywords: *Technical Efficiency, Traditional Markets, Data Envelopment Analysis, Market Levy Revenue, Returns to Scale*