

ABSTRAK

Penelitian ini menganalisis kelayakan investasi penambahan kandang sistem close house pada UMKM peternakan ayam broiler di Kulonprogo, Yogyakarta. Permasalahan yang dialami adalah tingginya mortalitas $>8\%$ dan kerugian pada kandang tradisional yang gagal memenuhi standar kemitraan inti-plasma dimana indeks kinerja ± 320 . Tujuan penelitian adalah mengevaluasi kelayakan aspek pasar, teknis, dan finansial.

Metode yang digunakan adalah studi kasus dengan pengumpulan data historis permintaan pada tahun 2023–2024, wawancara, dan observasi. Peramalan permintaan dilakukan dengan metode trend linear, sementara analisis finansial mencakup NPV, IRR, Payback Period (PP), dan sensitivitas dengan MARR 15%.

Hasil penelitian menunjukkan kelayakan investasi: NPV positif Rp271.202.096, IRR 23,6% melebihi MARR, dan PP 3 tahun 3 bulan 20 hari. Aspek pasar mengonfirmasi peningkatan permintaan dari 81.181 ekor (2025) menjadi 136.333 ekor (2029). Aspek teknis mengusulkan kandang dua lantai berkapasitas 19.788 ekor dengan allowance 5% untuk mitigasi gagal produksi. Namun, analisis sensitivitas mengungkap risiko ketidaklayakan jika terjadi penurunan penerimaan penjualan $\geq 3,3\%$ atau kenaikan biaya bahan baku $\geq 4,2\%$, yang mengubah NPV menjadi negatif.

Kata kunci: analisis kelayakan, peternakan ayam broiler, sistem close house, aspek finansial, sensitivitas.

ABSTRACT

This study analyzes the investment feasibility of adding a close house system broiler chicken coop for an MSME (Micro, Small, and Medium Enterprise) poultry farm in Kulonprogo, Yogyakarta. The core problems identified are high mortality rates ($>8\%$) and financial losses in traditional coops that fail to meet the standards of the core-plasma partnership scheme, where the performance index is approximately 320. The research aims to evaluate the feasibility from market, technical, and financial aspects.

The methodology employed is a case study, utilizing historical demand data (2023–2024), interviews, and observations. Demand forecasting was conducted using linear trend analysis, while financial analysis included Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period (PP), and sensitivity analysis, applying a Minimum Acceptable Rate of Return (MARR) of 15%.

The results indicate investment feasibility: a positive NPV of Rp 271,202,096, an IRR of 23.6% (exceeding the MARR), and a PP of 3 years, 3 months, and 20 days. The market analysis confirms increasing demand, projected to rise from 81,181 chickens (2025) to 136,333 chickens (2029). The technical aspect proposes a two-level coop with a capacity of 19,788 chickens, incorporating a 5% allowance to mitigate production failure risks. However, sensitivity analysis reveals feasibility risks: a decrease in sales revenue $\geq 3.3\%$ or an increase in raw material costs $\geq 4.2\%$ would render the NPV negative.

Keywords: *feasibility analysis, broiler chicken farming, closed-house system, financial aspect, sensitivity.*