SMART FARM MANAGEMENT IN BROILER PRODUCTION: TECHNOLOGIES AND PRODUCTIVE PERFORMANCE - A REVIEW

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Abstract

This narrative review assessed smart technologies and their implications for broiler productive performance. A structured search of ScienceDirect, PubMed, Web of Science and Scopus identified 46 references published in 2015-2026. Topics included microclimate monitoring, automated weighing, feed and water monitoring, precision feeding, IoT platforms and predictive analytics. Studies mainly demonstrated measurement and prediction capabilities, with more consistent results for live weight than mortality. Evidence of productive benefits from technology-guided interventions remained limited. Adoption barriers included costs, calibration, maintenance and interoperability. Wider use requires commercial validation, reliable data and evidence of productive and economic benefits.

Key words: *broiler production, Internet of Things, machine learning, precision livestock farming, predictive analytics*