

POULTRY FARM

INTRODUCTION

Despite Nigeria's significant contribution to poultry production in Africa, the sector faces several challenges that hinder its full potential. One major hurdle is the poor capitalization of the industry, which is predominantly characterized by smallholdings owned by peasant farmers. This lack of capitalization limits investment in modern infrastructure and technology, hindering efficiency and productivity. Additionally, the absence of integration and automation within the sector further exacerbates production costs and inefficiencies. These challenges are compounded by the lack of control over internal environmental conditions in poultry houses, leading to suboptimal welfare and health outcomes for the birds.

Another significant challenge in Nigeria's poultry sector is the issue of environmental heat stress, which can have detrimental effects on poultry reproduction and productivity. Managing heat stress requires specific measures and interventions, yet there is a notable gap in research and implementation in this area. Despite the recognized importance of controlling environmental parameters like temperature and humidity, the current practices often fall short, leading to decreased productivity and increased susceptibility to diseases among poultry populations.

Addressing these challenges requires a multifaceted approach that includes both technological advancements and policy interventions. Research into the application of smart technologies, such as wireless sensors and mobile systems, holds promise for improving monitoring and control of environmental parameters remotely. However, there is a need for targeted studies and interventions that are tailored to the unique weather conditions and farming practices prevalent in Nigeria. Furthermore, policy support and investment in the poultry sector are essential to promote modernization, improve capitalization, and enhance production efficiency, ultimately contributing to food security and economic development in the country.

S.No	TITLE	RESEARCH PAPER	YEAR	CHALLENGES	OBJECTIVES
1	Smart Poultry Farm	Journal	2019	1)Labor Intensive Processes 2) Environmental Monitoring and Control	1)Automation of Poultry Farming Processes. 2)Integration of Smart Technologies.
2	Smart Poultry Farm	Journal	2023	 Adaptation to Local Conditions. Reliability and Maintenance 	 Remote Monitoring and Control Enhanced Production Efficiency
3	Smart Poultry Farm	Journal	2020	 Integration of Multiple Technologies. Reliability and Security 	 Enhanced Automation and Efficiency. Remote Monitoring and Control

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4	Smart Poultry Farm	ICAECA	2021	 Manual Monitoring and Control. Environmental Variability and Management 	 IoT-Based Monitoring and Control. Enhanced Productivity and Cost Reduction.
5	Smart Poultry Farm	ISSN	2021	 Environmental Monitoring in Poultry Farming. Security and Intruder Detection 	 Real-Time Monitoring and Control. Enhanced Welfare and Productivity
6	Smart Poultry Farm	ICETET	2022	 Efficient Management of Poultry Farming Environmental Monitoring and Control 	 Automated Poultry Management Enhanced Bird Health and Welfare

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