

A PROPOSED INVENTORY MANAGEMENT SYSTEM FOR CARLA HATCHERY

ABSTRACT

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Carla Hatchery plays a vital role in the agricultural sector by producing and supplying day-old chicks through artificial incubation. While hatchability rates remain high, chick mortality continues to pose a significant challenge. To address this, the study explores the integration of real-time monitoring and advanced resource management into a unified system. This integrated approach aims to enhance operational efficiency, maximize equipment utilization, and ultimately reduce mortality rates. The study seeks to evaluate how such a system can improve hatchery practices and support sustainable poultry production. This study employs a quantitative research design, using purposive sampling to collect data from the hatchery owner and staff with hands-on experience in manual record-keeping. Participants are selected based on their direct involvement in hatchery operations to ensure relevant expertise. The study aims to assess current manual documentation practices, identify operational challenges, and explore the perceived benefits of digitalization. Data will be gathered through surveys, focusing on hatchability rates, mortality rates, documentation time, and the effectiveness of real-time tracking. The survey revealed that hatchery operations continue to depend on manual record-keeping, resulting in inconsistent data, time-consuming processes, and difficulties in tracking egg incubation periods. These challenges highlight the pressing need for modernization. The findings support the adoption of an integrated digital system to improve data accuracy, streamline operations, and enhance resource accountability across all stages of production through a centralized digital platform. Transitioning from manual to digital record-keeping significantly enhances the accuracy and efficiency of hatchery operations, particularly when managing multiple egg batches. A digital system enables real-time entry of incubation dates, allowing multiple batches to be recorded and tracked simultaneously. A key feature of the system is its smart notification function, which alerts users only when eggs are about to hatch or have already hatched—ensuring timely action without unnecessary interruptions. By streamlining data management and improving monitoring, digitalization has proven to boost overall productivity and operational performance.

RECOMMENDED CITATION

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