

IMPLEMENTATION OF ECONOMIC ORDER QUANTITY METHOD TO MANAGE ANIMAL STOCK IN ANIMAL HUSBANDRY MANAGEMENT INFORMATION SYSTEM

(Case study: Goatday Sheep Farm)

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ABSTRACT

The development of information technology has encouraged various sectors to digitize, including in the livestock sector. Goatday Farm, as one of the businesses engaged in selling sheep for the purposes of Qurban, Aqiqah, and other events, still uses book recording in managing animal data, purchases, and sales. This causes the risk of recording errors, and a slow reporting process. This study aims to implement a web-based livestock management information system that can help record transactions and provide reports in PDF format. This system is designed using the Waterfall method, starting from the stages of needs analysis, system design, implementation, to testing. The three main actors in the system are Finance managing purchases and animal data, Marketing managing sales, and Owner monitoring reports. As an innovation, the system is equipped with the Economic Order Quantity (EOQ) method to assist the Finance department in determining the optimal number of animal repurchases, so as to minimize the risk of shortages or excess stock and reduce operational costs. The test results show that the system is able to run well and according to needs, with a success rate of 97.4% from 39 test scenarios. Thus, the implementation of this system can improve business processes at Goatday Farm.

Keywords: *Information systems, Management, Sales, Livestock.*