## SMART MANAGEMENT SYSTEM FOR LAYING HENS USING FUZZY TSUKAMOTO ON UD. BAROKAH UTAMA FARM BONDOWOSO

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## **ABSTRACT**

The purpose of this study is to examine whether tsukamoto's fuzzy logic can be used to predict the turn on or off of fans and lights used for ideal fixed cage management. Cage management remains ideal to maintain the condition of the cage in accordance with the conditions needed by laying hens and to avoid laying hens from contracting diseases. One way to perform an analysis of systems that contain uncertainty is to use fuzzy logic itself. This study uses the Tsukamoto method with the Min implication function and defuzzification is carried out using the average method. From the results of research that has been carried out by looking for a temperature of 30 degrees Celsius, humidity of 70 percent, using the fuzzy tsukamoto method, namely for the fan to turn on and the lights also turn on.

Keywords: Fuzzy Logic, Tsukamoto Method, Decision Making, Arduino, Laying Hen Coop, Control System.