

## ABSTRACT

The fluctuating production of laying hens is a challenge for breeders; the attack of Avian Influenza, Infectious Bronchitis, and the fault of harvesters cause a decrease in egg production. The research was conducted to determine the sources of production risk, probability, and impact of the sources of production risk at CV Mitra Bhuwana Mandiri Kediri. The research was conducted using a case study method, of which the samples were selected from closed house cages and open house cages, each of which had 2,500 chickens. The source of risk was known using interviews, the probability of production risk with Z-Score analysis, while the impact of the production risk with Value At Risk. The results of the study showed that infectious bronchitis in closed houses was 37%, labor for open houses was 35%, avian influenza was 32% in closed houses, infectious bronchitis was 27% in open houses, labor was 27% in closed house, and avian influenza in open houses was 25%. The financial impact of avian influenza production risk source in closed houses was IDR 16,294,898, while that of avian influenza in open houses was IDR 3,859,590. The financial impact of infectious bronchitis in closed-houses was IDR 4,074,064, while that of infectious bronchitis in open houses was IDR 1,899,792. The financial impact of labor in closed house cages was IDR 955,885, while that of labor in open houses was IDR 670,394.

Keywords: *avian influenza, infectious bronchitis, Z-score, Value at Risk*