ABSTRACT

BUDIMAN. A Study of Environmental Risk Factors in Outbreak of Avian Influenza in Human (Case Control Study in West-Java Province). Under the supervision of BIBIANA WIDIYATI LAY as chairlady, KHAIRIL ANWAR NOTODIPUTRO, TRI EDHI BUDHI SOESILIO, and I WAYAN TEGUH WIBAWAN as members of advisory committee.

Avian Influenza has become a global issue and requires proper management to prevent the outbreak of Avian Influenza. Numbers of occurrence in Indonesia until February 2008 reached 126 cases, with death rate 103 cases (81,7%). The highest incidence happened in West-Java Province in which the number of positive Avian Influenza cases reached 31 people. The objectives of this research is to study environmental risk factors related to Avian Influenza outbreak in human.

The method used in this study include a case control study which is based on statistical models as well as system dynamics to develop intervention model useful for policy decision in reducing the incidence of avian influenza. The result showed that the highest for AI disease is contact activities (OR=86,02). It was also shown that contact activities, contact frequency and livestock hygiene significantly affect the incidence of AI disease. This study also recommended the importance of policies to improve the hygiene of livestock and to reduce contact activities of the people from infected livestock.

Keyword: Environmental Component, Avian Influenza, Case Control Study