

**ENVIRONMENTAL IMPACTS OF BROILER FARMING IN RURAL
AREAS
(A CASE STUDY IN KAMBURUPITIYA AREA)**

S S Paththinige, G A Chandana & R T Serasinhe
Faculty of Agriculture, University of Ruhuna

Broiler farming was popular among the rural farming community during last decade due to ever increasing consumer demand. Most of these farmers engage in broiler farming expect higher profits for their ventures but they do not consider about the hazards done to the surrounding environment. Therefore, the objective of this survey was to find out the causes, which negatively affect on the surrounding environment and advice farmers how to reduce the above impacts. A house survey was conducted in Kamburupitiya area by visiting the broiler farms to monitor the dust and ammonia levels in the cages, litter management, slaughtering process etc.

The results of this survey revealed that, all the farmers expect higher profits from their ventures while having little skill, knowledge and technology. 90% of the farmers have taken correct initial steps in the construction of cages considering north-south direction, selection of sloppy lands etc. However all the cages were located very close to the residential areas and public roads (less than 25m) due to security reasons. It was also found that the cages (100%) situated in sloppy lands were very close to the water bodies. Even if the north-south direction was correct 20% of the cages were situated under high shade condition preventing natural disinfection. 50% of the cages had metal roofing sheets, which lead to heat stress during daytime. It was also revealed that more than 50% cages had poor ventilation due to some barriers such as vegetation and closely constructed cages. 60% of the cages had very strong ammonia smell inside while 40% farms had strong ammonia smell due to poor litter management and ventilation. None of the farmers mixed the litter with lime and they did not turn and mix litter frequently or even not bothered to change the wet litter as well. Dust level was higher in 70% of the cages and medium in 30% of the cages leading the surrounding environmental problems. All the farmers processed chicken by them selves, but there were no problem of offal disposal. None of the farmers do record keeping, use of footbath and contact advisory services.

High concentration of ammonia and dust in the surrounding environment leads to cause respiratory problems in near by public and ammonia may leads to cause toxic effects also.

Most of these farms have over ten-year history but their knowledge about proper management practices has not updated. They just gather information from neighbour farmers and they have no theory knowledge about broiler management. If the farmers can be educated about the proper management practices such as litter management, ventilation, proper housing and maintenance, proper waste disposal and disinfection of sheds etc. it is possible to maximize profit while minimizing the negative impacts on the environment.