

Biosecurity Evaluation of Poultry Production Cluster (PPCs) in Thailand

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Abstract :

The objective of this study was to evaluate the biosecurity levels of Poultry Production Clusters (PPCs) in Thailand. Biosecurity levels of poultry farms in the PPCs were determined with criteria specified in biosecurity score form in 3 provinces i.e., Maharakham (contract farm with company), Nakhon Phanom (cooperative farm) and Nong Khai (individual farm) in the Northeast region of Thailand. In each province, biosecurity levels were evaluated both in the controlled group and in the cluster (15 farms each). Biosecurity scores were compared between farms in the controlled group and the cluster and among 3 provinces. From the results, it was found that scores of attractiveness to wild bird, measures for visitors and traders, measures for equipments and vehicles of poultry farm, local environment, measures taken at the entrances to poultry sheds in poultry farms and biosecurity plans of poultry farmers in Maharakham were significantly higher than in Nakhon Phanom and Nong Khai ($p < 0.05$). The score of measures related to staffs of the poultry farms in Nakhon Phanom was significantly higher than those in Nong Khai ($p < 0.05$). The score of feed quality in Maharakham and Nong Khai was significantly higher than that in Nakhon Phanom ($p < 0.05$). In Maharakham, scores of local environment and biosecurity plans of poultry farmers of the controlled group were significantly higher than those of the cluster ($p < 0.05$). In Nakhon Phanom, scores of attractiveness to wild bird, measures for incoming poultry, measures for visitors, measures taken at the entrances to poultry sheds and biosecurity plans of poultry farmers in controlled group were significantly higher than in the cluster ($p < 0.05$). This demonstrated that biosecurity levels of contract farm with company were better than cooperative and individual ones. The difference of biosecurity levels was due to the farming pattern, farm's ecology, the compliance to governmental measures and policies and the ability to invest in biosecurity system of each group. As a result, the scores of biosecurity differed.

Key Word :

Biosecurity, score, poultry production cluster, PPCs, Thailand

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