

SURVEY ON PREVALENT DISEASES IN COMMERCIAL POULTRY FARMS IN YEWA SOUTH LOCAL GOVERNMENT, OGUN STATE

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ABSTRACT

A survey on the prevalent diseases in commercial poultry farms was carried out in Yewa South local Government Area, Ogun State, Nigeria, using an oral interview and a close ended questionnaire which was issued to 100 selected Poultry Farmers within the study area. According to the data obtained from the study, Newcastle disease (72.0%), Coccidiosis (59.0%), Chronic respiratory disease (CRD) (44.0%), Infectious bursal disease (IBD) (37.0%), Fowl pox (26.0%), Fowl cholera (25.0%), Egg drop syndrome (21.0%), Fowl typhoid (13.0%), Marek's disease (10.0%) and Avian Influenza (4.0%) are the major disease of economic importance in poultry business in the study area. According to the data obtained from the respondents, NCD, IBD, Coccidiosis, and CRD are the most common diseases among poultry farms in the study area. Newcastle disease (72.0%) which has the highest number in the frequently occurring disease in poultry farms in the study area. As such a complete biosecurity measures should be imposed to the farms and also a proper vaccination schedule should be adhered to.

Keywords: Diseases, Newcastle, Poultry, Prevalence, Yewa-South

INTRODUCTION.

The poultry industry has contributed enormously to the growth and sustainability of the Nigeria economy (Ambali *et al.*, 2003). This is as a result of the continuous increase in the population of poultry farms in the country which were estimated to be rearing approximately 190 million poultry birds (Orajaka, 2005). This significant and important aspect of the agricultural sector is being faced with constraints of high mortality resulting majorly from infectious diseases of viral, bacterial and fungal origin (Guéye, 2004; Chansiripornchai, 2004; Abdu *et al.*, 2005), and other non-infectious sources like housing, feeding, breeding, marketing and information dissemination (Guéye, 2004).

Generally, in Nigeria, major diseases of poultry predominantly identified in commercial poultry are Newcastle disease (ND), Infectious bursal disease (IBD) or Gumboro, Fowl cholera, Coccidiosis, Mycoplasmosis, Fowl typhoid, Marek's disease (Adene, 1996). Most poultry farmers have lost returns on their investment to death of flocks as a result of diseases, because information is scanty on the prevailing poultry diseases in different locality. The research will therefore help to uncover prevailing poultry disease in Yewa-South Local Government of Ogun State. It will further help in suggesting possible solutions to this menace which is necessary for the poultry industry growth.

MATERIALS AND METHOD

Study area

Yewa South Local Government in Ogun State lies between Longitudes 2°47'24"E and 3°6'48"E, and Latitudes 6°37'46"N and 6°55'42"N. The area is bounded on the East by Ifo and Ado – Odo/ Ota local Government and on the West by Ipokia Local Government and north by Yewa North. The Local government area is inhabited predominantly by the Yoruba speaking people of South Western Nigeria. It has a total land area of 629.38 square kilometers, with population of 150,850.

Data collection

The data for the survey was collected using a total of one hundred and twenty well-structured questionnaires from poultry farmers of selected poultry farms in the study area. Due to unequal distribution of poultry farms in the towns under study. Stratified random sampling method was used to collate data. The structured interview guide was divided into three sections to acquire information from farm personnel on the following: status of respondents; management information of the birds; disease status of the birds (Ukashatua, Magaji, Najamuddeen, and Saulawa, 2012).

Data analysis

In other to achieve the objectives of this study, the data collected was subjected to descriptive analysis using Statistical Package for Social Sciences (SPSS).

RESULT AND DISCUSSION

Distribution of commercial farms in the surveyed area

Figure 1 shows the distribution according to location of commercial poultry farms surveyed in Yewa South Local Government. Among all towns and villages surveyed, it was revealed that Ilaro has the highest commercial poultry farmers and Eredo has the lowest commercial poultry farmers.

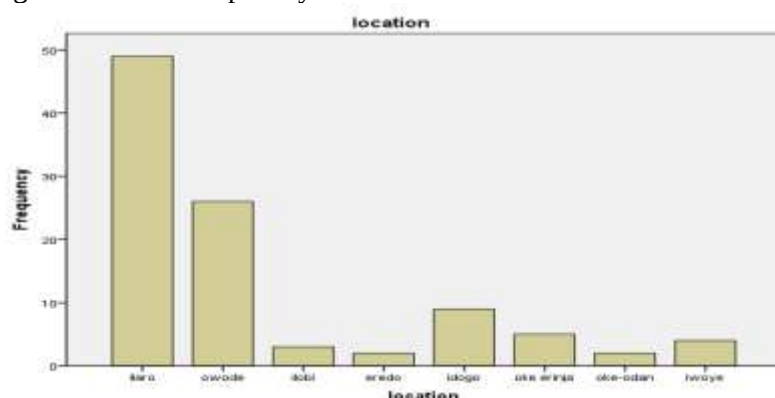


Figure 1: Distribution of commercial farms in the surveyed area (Source: Field Survey, 2020).

Gender of the respondent

According to table 1, males are dominantly practicing commercial poultry farming which accumulate (99.0%) of 100 farm surveyed while female accumulate for (1.0%) of 100 farm surveyed.

Table 1: Gender of the respondents

Parameters	Percent (%)
Male	99.0
Female	1.0
Total	100.0

(Source: Field Survey, 2020)

Level of Education of Commercial Poultry Farmers in the study area

The distribution according to level of education of farmers in commercial poultry farm in Yewa South Local Government Area is presented in Table 2. It shows that most farmers were graduate of tertiary institution.

Table 2: Level of Education of Commercial Poultry Farmers in the study area

S/N	Parameters	Percentage
1	Secondary	20.0
2	Tertiary	66.0
3	Others	14.0
Total		100.0

(Source: Field Survey, 2020)

Flock size of commercial poultry farms surveyed.

The distribution according to size of flocks in commercial poultry farm in Yewa South Local Government is presented in Figure 3. It revealed that farms with 1000 – 5000 flocks has the highest percentage while 0 – 100 was the lowest.

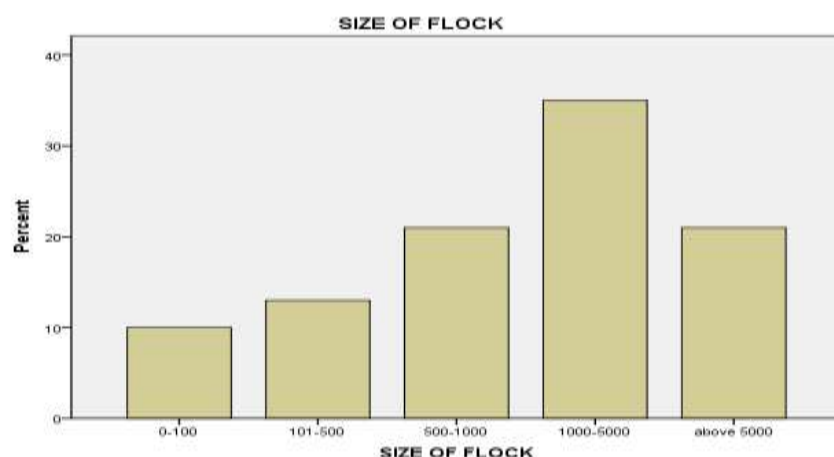


Figure 2: Flock size of the commercial poultry farms in the study area (Source: Field Survey, 2020).

Management System practiced by the surveyed poultry farms

Out of the 120 farms surveyed, 87% of the farms are practicing intensive system of management, while 10% and 3% practiced extensive system and semi-intensive of management respectively (Fig. 3).

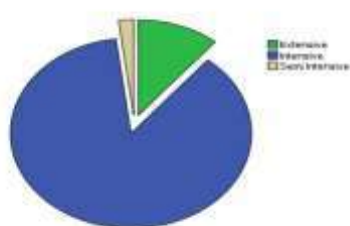


Fig. 3: Management System practiced by the surveyed poultry farms (Source: Field Survey, 2020).

Species of bird raised in commercial poultry farm surveyed

As presented in figure 4, commercial layers are the highest type of poultry bird raised in commercial poultry farms in Yewa South Local Government Area.

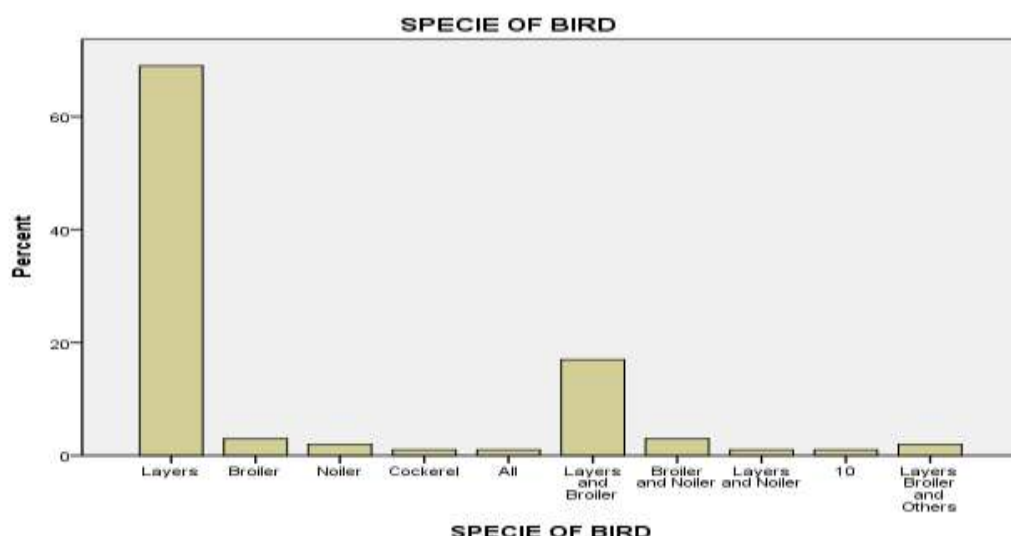


Figure 4: Species of bird raised in commercial poultry farm surveyed (Source: Field Survey, 2020)

Years of Experience of Farmers in the study area

Figure 5 describe the years of experience of the respondents. Majority of the respondents has 5 to 10 years of experience while the least has above 40 years of experience.

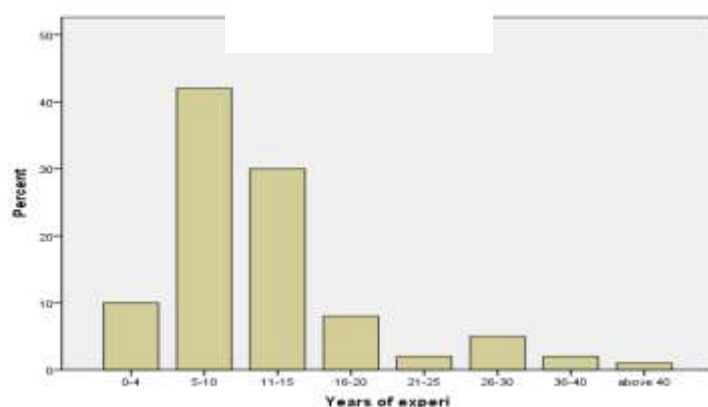


Figure 5: Years of experience of farmers in commercial poultry farms surveyed (Source: Field Survey, 2020)

Disease prevalent in commercial poultry farms surveyed

Disease prevalent in commercial poultry farms in Yewa South Local Government of Ogun State are expressed in figure 6. From the data below, New castle disease has the highest value followed by Coccidiosis and Chronic respiratory disease respectively. Bird flu (Avian Influenza) was the least occurring disease in the study area.

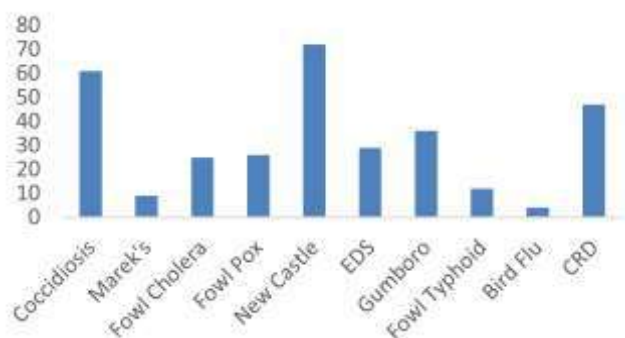


Figure 6: Disease prevalent in commercial poultry farm surveyed (Source: Field Survey, 2020)

Discussion

From the result obtained from this survey, 86 % of the poultry farms owners interviewed are literate with minimum of Secondary School education as presented in table 2. This corroborate the findings of Bala *et al.* (2012) where they reported that the respondents in the surveyed area are literate and well enlightened about predominant poultry diseases found within the study area. As presented in fig 4, 87% of the surveyed farms are practicing

intensive system of management, this result is similar to that of Ukashatua *et al.* (2012) who reported in their research that intensive system of management is mostly practiced among commercial poultry farms in their studied area and are therefore aware of the economic impact of these diseases to the poultry production. Newcastle disease (72.0%) was found to be more prevalent in the study area; this outcome is contradicting to the findings of Ukashatua *et al.* (2012) who reported that Coccidiosis disease is more prevalent in Katsina (23.42%), Nigeria. This could be as a result of the differences in geographical location and environmental conditions and also system of management which always play a major role in determining the prevalence of a particular disease. The high prevalence of Newcastle disease seen in this study may be as a result of not taking preventive measures (vaccination) against the disease (Newcastle). According to the data obtained from the study, Newcastle disease (72.0%), Coccidiosis (59.0%), Chronic respiratory disease (CRD) (44.0%), Infectious bursal disease (IBD) (37.0%), Fowl pox (26.0%), Fowl cholera (25.0%), Egg drop syndrome (21.0%), Fowl typhoid (13.0%), Marek's disease (10.0%) and Avian Influenza (4.0%) are the major disease of economic impact on poultry business in the study area, this result agrees with the findings of Ukashatua, Magajia, Najamuddeenb, and Saulawac, (2012) where they found Newcastle disease, IBD, Coccidiosis, CRD, Fowl cholera, and Fowl pox to be the common disease among poultry farms causing high morbidity and mortality rate within the shortest possible time in a flock.

CONCLUSION AND RECOMMENDATION

CONCLUSION

The discovery from the study indicts Newcastle as the most prevalent disease in commercial poultry farms in Yewa South Local Government, Ogun state. Other disease of economic important as revealed from the study includes Coccidiosis, Chronic respiratory disease (CRD), Infectious bursal disease (IBD), Fowl pox, Fowl cholera, Egg drop syndrome, Fowl typhoid, Marek's disease and Avian Influenza.

Recommendation

Based on the data generated from this study, vaccination schedules should be adhered to thoroughly and promptly, a proper bio security measures should be mounted on commercial poultry farms, good nutrition should be prioritized.

REFERENCE

- Abdu, P. A., Wakawa, A. M., Sa'idu, L. and Umoh J. U. (2005). Avian influenza: A review. *Nigerian Veterinary Journal*, 26:34-43.
- Adene, D. F. (1996). International poultry health problems: Perspective from the poultry industry in Africa. In *Proceedings, 20th World Poultry Congress, New Delhi, India* 2: 401-414.
- Ambali, A. G., Abubakar, M. B. and James, T. E. (2003). An assessment of poultry health problems in Maiduguri, Borno State, Nigeria. *Tropical Veterinarian*, 21:138-145.
- Bala, A., Muhammed, L. U., Dachin, P. K., Saulawa, M. A., Anzaku, S. A., Abdullahi, A., Samuel, P., and Ifende, V. I. (2012). Participatory Surveillance of Livestock and Poultry Diseases in Agidi Development Area of Nassarawa State Nigeria, *Scientific Journal of Veterinary Advancement*. 1 (2), 38-41.
- Chansiripornchai, N. (2004). Molecular interaction of *Ornithobacterium rhinotracheale* with the eukaryotic cells: A PhD thesis at Utrecht University Yalelaan, The Netherlands: pp1-4. Igitur archive library .uu. NL (Accessed 2005).
- Guéye, E. F. (2004). Gender aspect in family poultry management systems in developing countries. <http://www.fao.org/ag/againfo/themes/en/infpd/documents/papers/2004/12gender318.pdf>. (Accessed 20th, September, 2008).

- Orajaka, L. J. E. (2005). The role of local Chicken in poultry productions in Nigeria. *Nigerian Veterinary Journal*, 26:68-72.
- Ukashatua, S., Magajia, A. S., Najamuddeenb, G., and Saulawac, M. A. (2012). Survey of poultry diseases among exotic breeds of poultry in Katsina metropolis, Katsina state, Nigeria. *Scientific Journal of Zoology*. 1(3) 69-73.