



## Analysis of microbiological and antibiotic resistance risks in poultry farming practices and sanitary management in the prefectures of Avé and Zio, Togo

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### ABSTRACT

*Objective:* This study examined poultry husbandry practices and hygiene management on poultry farms in Togo.

*Methodology and results:* A cross-sectional survey was conducted among poultry farms in Avé and Zio prefectures, focusing on knowledge of good agricultural practices, risk of disease transmission, and antibiotic use. A total of 38 poultry farms and 76 samples (poultry faeces and eggs) were included in the study. Farmers' educational profile and marital status significantly influence their poultry farming practices. Most farmers received training on good agricultural practices, with the Poultry Sector Support Program organizing the training. Farmers showed good knowledge and a positive attitude towards poultry farming. However, concerns about disease transmission and antibiotic resistance have been raised. The prevalence of coccidiosis and *E. coli* strains, inadequate prevention and control measures, and inappropriate antibiotic practices were observed.

*Conclusion and application of results:* The results highlight the importance of ongoing training, biosecurity measures, and responsible use of antibiotics in poultry farming to reduce risks and promote sustainable practices. The Avé and Zio prefecture's poultry farmers must receive training in two areas: (1) the proper use of antibiotics (correct antibiotic for the disease, following the route of administration recommended by the manufacturer, respect the waiting period after administration, respect for the target species, always consult a veterinary doctor); and (2) the management of coccidiosis (detection of clinical signs, quarantining of sick animals.) on poultry farms.

**Keywords:** Poultry farming, attitudes, practices, microbiological risk, antibiotic resistance risk, biosafety, Togo.