



Characterization of poultry production systems and practices related to veterinary antimicrobial use in Fada N’Gourma, Eastern Burkina Faso

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ABSTRACT

Objectives: This study characterized poultry production systems and assessed veterinary antimicrobial use practices in Fada N’Gourma, Eastern Burkina Faso, with particular emphasis on biosecurity, disease management and practices potentially associated with antimicrobial resistance.

Methodology and Results: A cross-sectional survey was conducted from July to September 2024 among 20 small-scale poultry farmers as well as 20 animal production and health professionals. Data were collected using a structured questionnaire and subjected to descriptive analysis. Exotic chickens were the predominant poultry species (42.1%), while digestive and respiratory diseases were the most frequently reported health problems. The implementation of biosecurity measures was inadequate: only 10.87% of farms had footbaths, and 32.61% complied with the recommended stocking densities. Antimicrobials were widely used, mainly for disease prevention, and 70% of farmers reported not respecting the recommended withdrawal periods.

Conclusions and application of results: Poultry production in Fada N’Gourma is constrained by inadequate biosecurity and inappropriate antimicrobial use, which may increase the risk of antimicrobial resistance and antimicrobial residues in poultry products. Le renforcement de la formation des éleveurs et de l’encadrement vétérinaire, la promotion d’un usage prudent des antimicrobiens et l’amélioration du respect des délais d’attente pourraient contribuer à une meilleure santé des volailles et à une meilleure sécurité sanitaire des aliments. Consolidating veterinary drug regulation within a One Health framework could support sustainable poultry production and help preserve antimicrobial effectiveness.

Keywords: Poultry production; antimicrobial use; biosecurity; antimicrobial resistance; veterinary drugs; Burkina Faso.