

# **Progress towards Improving Biosecurity and Livelihood of Small-Scale Poultry Producer in Egypt**

**EL Bably, M .A and Asma, N .M.**

**Management & Zoonoses, Faculty of Vet. Med, Benisuef University, Benisuef**

**Problem.** Poultry represents an important sector in animal production in Egypt, with small scale poultry farms representing a huge majority. Backyard and small scale production sector exhibits a very low adoption of biosecurity practices, thus is highly precarious in the occurrence of avian disease outbreak such as Infectious bronchitis (IB) or zoonosis such as Highly Pathogenic Avian Influenza (HPAI).

**Objective.** To assess the biosecurity measures instituted in the small-scale commercial poultry farms and free-range bird flocks owned by households in the rural areas and to develop a plan to improve biosecurity measures at different poultry sectors in Beni-suef Governorate.

**Methodology:** A cross-sectional study targeting small scale poultry farms (sector 3), backyards and live bird markets conducted using a stratified sampling method across three regions in Beni-suef Governorate. Serum, tracheal, and cloacal swabs were randomly collected from birds (apparently healthy & diseased) and their surrounding environment in the investigated sectors for detection of some pathogens of zoonotic importance (HPAI, *E.coli* & salmonella species) as index of biosecurity level. The collected data through questionnaire administration to farms and flock owners subjected to a traffic light system model to test for relative risk of pathogens infection based on the biosecurity measures. A plan for biosecurity at different poultry sectors based on the obtained information and local resources was discussed

**Expected outcomes:** The development of efficient and effective biosecurity measures against poultry diseases on small-scale commercial farms requires adequate placement of barriers to provide segregation, cleaning and disinfection, while concerted community-led sanitary measures are required for free-range poultry flocks in Egypt.