

Backyard poultry production in Chile animal health management and contribution to food access in an upper middle-income country

Di Pillo, F., Anríquez, G., Alarcón, P., Jimenez-Bluhm, P., Galdames, P., Nieto, V., ... & Hamilton-West, C. (2019). Backyard poultry production in Chile: Animal health management and contribution to food access in an upper middle-income country. *Preventive veterinary medicine*, 164, 41-48. <10.1016/j.prevetmed.2019.01.008> Accessed 22 Apr 2021.

Abstract

Backyard production systems (BPS) that involve poultry are a good way to improve food security and poverty alleviation. Few studies have been carried out to quantify the contribution of poultry production to these households and the constraints they might face if a priority animal disease enters these systems. This study aims to characterize the poultry-rearing BPS in central Chile and to identify socio-economic factors associated to households' consumption of poultry. Data was collected from 384 BPS through a face-to-face semi-structured questionnaire. Value chain framework associated with BPS poultry rearing and cash flow analysis of BPS was done to identify the inputs/outputs of the system and to know the profitability of the system. Multiple linear regression was performed to identify the BPS and household factors associated to poultry consumption. The results of this study suggest that BPS in central Chile have biosecurity deficiencies such as: lack of confinement, lack of veterinary assistance and incorrect handling of dead animals. Cash flow analysis indicated that 62% of the BPS had a positive balance from production. Distance to closest market and per capita income were factors associated to poultry value to farmers. Different factors were significant predictors of household poultry consumption. Positive predictors of consumption were identified as: (i) older owners, (ii) higher transportation price to closest market, (iii) larger flock size (iv) birds raised by women and (v) owning a car. On the contrary, (i) higher per capita income and (ii) bigger household size predicted a reduction in consumption. The results indicate the importance of BPS to low-income families and those living in remote areas while also highlighting the vulnerability of these systems to disease risks..