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Estimating Live Body Weight of Indigenous Chickens Will Help Rural Farmers Negotiate Equitable Prices of Birds in Uganda

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Introduction

■Chicken in Uganda is sold on face value and not by actual weight, which often reduces the farmers' bargaining power for premium prices.

■Applying body measurements to determine live body weight of Ugandan chicken to set prices with accuracy was planned.



Materials and Methods

Prediction of live body weight using linear body measurements, viz;

◊Live Body Weight (LBW), ◊Corpus Length (CL), ◊Chest Circumference (G), ◊Femur Length (FL), ◊Femur Circumference (FC), ◊ Shank Length (SL) ◊Keel Length (KL) were measured.

Parameters found to be significantly correlated with body weight were subjected to regression procedures for developing prediction equations

On-farm and market prices offered using visual measurements and estimated weights based on girth were compared.



Results and Discussion

◊Chest Circumference, Girth (G) showed the highest correlation to body weight.

◊ The Power Model (Figure 1) was the most suitable predictor model. By visual judgment, farmers lost between $0.6 and $0.65 @kg while buyers in markets paid between $0.1 and $0.2 more @ kg.

◊ Compared with the commercial chicken prices, prices based on estimated weights translated into premiums of about 13.8% for hens and 21.7% for roosters in markets.

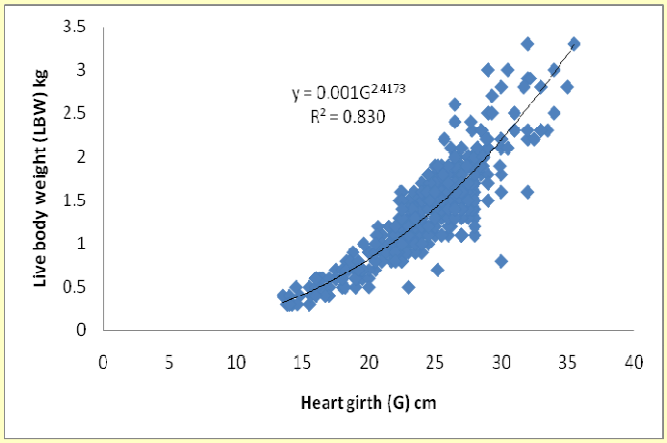


Figure 1: A power-model graph of live body weight against chest circumference

Conclusion

Use of calibrated tape measures to determine live body weights of live birds could provide an informed basis for negotiation by farmers' for better prices from buyers on farm and save consumers from exploitation by market vendors.

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