



## **EFFECT OF FARM POWER SOURCES ON POULTRY PRODUCTION IN OGUN STATE, NIGERIA**

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### **ABSTRACT**

The study examined the effect of farm power sources on poultry production in Ogun State, Nigeria. The Objective of the research were to describe the socio – economic characteristics of the respondents, identify the farm power sources available to the poultry farmers and the operations where they are utilized, estimate the cost associated with the utilization of each of the farm power source identified, determine the factors that influence the choice of farm power source and determine the effect of farm power source on Poultry production. Data was collected from randomly selected 120 poultry farmers using well-structured questionnaire. Data were analysed using Descriptive statistics, cost estimate, linear regression and Multi-variate Probit. Respondents were asked questions that had to do with their socio – economic characteristics, inputs, farm power sources used. The results showed that the mean age, farming experience and household size was 41 years, 10 years and 6 persons respectively. The amount spent monthly on power sources were Electrical ₦15608, Human ₦16900, Solar ₦10508, Wind ₦858, Mechanical ₦5592. The regression analysis revealed that factors that influence the choice power positively includes Age ( $P < 0.10$ ), income from other sources ( $P < 0.01$ ), labour ( $P < 0.05$ ), farm income and cost of production ( $P < 0.01$ ) and negatively include marital status ( $P < 0.05$ ) with an  $R^2$  of 0.9805. Multivariate Probit analysis revealed the factors influencing the choice of farm power positively include Electricity (cost of electricity  $P < 0.01$ ), Mechanical (cost of machinery  $P < 0.01$ ), Solar (farm experience and education cost  $P < 0.05$ ) and negatively include Electrical (farm experience  $P < 0.10$ ), Mechanical (farm distance  $P < 0.10$ ) model chi<sup>2</sup> (3) to be 3. 47947. The study has shown that farmers who use various farm power sources available to them have higher productivity than those that do not use. Government should help poultry farmers in getting other sources of farm power available to the farmers such as the biogas, wind, biomass and so many others which will increase the productivity of the farm and income of the nation.

**Keywords:** Effect, Farm power, Poultry, Production, Utilization.