

## **Determinants of farm mechanization among arable crop farmers in Ibarapa zone, Oyo State, Nigeria.**

**SA Adewuyi, OF Ashaolu, IA Ayinde, SO Ogundele**

University of Agriculture, Abeokuta

Department of Agricultural Economics & Farm Management

### **Abstract**

This study assessed the determinants of machinery use among farmers in Ibarapa zone of Oyo State, with special focus on its determinants and the differential farm productivity of users and non-users of farm machinery in the zone. One hundred and twenty five (125) arable crop farmers were interviewed using two stage stratified simple random sampling technique while information from sixty (60) users and forty (40) non-users of farm machinery was used for analysis. Data collected were analysed using descriptive statistics, Logit regression analysis, budgetary analysis and test of difference of mean. The study revealed that, relative to non-users of farm machinery; majority of the farmers using machinery were relatively younger, more educated, cultivated larger area of farmland and have more exposure to extension agents. The logit regression results revealed that farm size ( $p \leq 0.10$ ), farm income ( $p \leq 0.10$ ) and farming experience ( $p \leq 0.10$ ) significantly affected the use of farm machinery in the study area. The test of hypotheses revealed that users of mechanisation significantly made more profit (N73, 299.69) than non-users (N23, 153.87) ( $p \leq 0.10$ ). The study recommended that farmers should be encouraged to cultivate large farm holdings through collective or cooperative effort and that majority of the farmers should be more enlightened to use farm machinery as an avenue for improved farm productivity and profitability.

### **Keywords**

Farm Mechanisation; Determinants; Profitability; Arable-crop Farmers; Oyo state