

AGRICULTURAL MACHINERY USE-MANAGEMENT IN RIVERS STATE

Nkakini, S. O.

Department of Agriculture and Environmental Engineering
Rivers State University, Port Harcourt, **NIGERIA**

ABSTRACT

A study on Agricultural Machinery use-management was carried out in Local Government Areas (LGAs) and five (5) Institutions in Rivers State. Questionnaires were administered on respondents in the various institutions, agricultural establishments. Data were collected from farms, owned by either the government or private sectors. Data groups included number of tractors, type, make & model of tractors; status at purchase of equipment; types of operation by tractors; conditions of tractors and implements; hourly engagement of the tractor in a year. The data were analysed using descriptive statistics and the coefficient of rank correlation. The result showed that Rivers State University farm had the highest hourly engagement of 120 hours and 0.001% Coefficient of Variability (CV). Obio-Akpor/ADP had a sum of 88 hours and CV of 19%, SIAT, Ubima Estate and Ikwerre/Vintage Farm LTD had 80 hours and 0.01% CV each while Prison Farm, Elele had 45 hours of 35% CV. On operations, RSU farm was highest (240) followed by Ikwerre/Vintage Farm LTD (19), Prison Farm, Elele (11), Obio-Akpor/ADP and SIAT, Ubima Estate performed 10 different field operation each resulting to CV: 0.23%, 19%, respectively. The finding that hourly engagement of 120 hours of RSU farm indicate the highest obtain when compared with others with respect to standard working hour of 1,000 of a tractor. The Ferguson-models 135 and 240 were the mostly used tractors in Ikwerre/Vintage Farm LTD and SIAT, Ubima Estate had two new model each with average age of 7 years while Obio-Akpo/ADP had one old model of 15 years old. Massey Swaraj-model 978FE and Steyr were operated by other LGAs and institutions all old models. There was significant difference ($P<0.05$: $PV=0.043615$) between hourly engagement and number of operations on the farms. The Rivers State government should assist farmers through the provision of subsidy in hiring/purchase of tractors to ensure mechanization of agriculture in the state.

Keywords: Agricultural Machinery; Machinery use-management; Tractor model; Field operations; Farm Establishments; Agricultural Mechanisation.