

## Effect of Information and Communication Technology (ICT) Usage by Cassava Farmers in Otukpo Local Government Area of Benue State, Nigeria

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**Abstract :** The study analyzed the effect of information and communication technology (ICT) usage on cassava farmers in Otukpo local government area of Benue state, Nigeria. Primary data was collected from 120 randomly selected cassava farmers using multi-stage sampling technique. A structured questionnaire and interview schedule was employed to generate data. Data were analyzed using descriptive (frequency, mean and percentage) and inferential statistics (OLS (ordinary least square) and Chi-square). The result revealed that majority (78.3%) were within the age range of 21-50 years implying that the respondents were within the active age for maximum production. 96.8% of the respondents had one form of formal education or the other. The sources of ICT facilities readily available in area were radio(84.2%), television(64.2%) and mobile phone(90.8%) with the latter being the most relied upon for cassava farming. Most of the farmers were aware (98.3%) and had access (95.8%) to these ICT facilities. The dependence on mobile phone and radio were highly relevant in cassava stem selection, land selection, land preparation, cassava planting technique, fertilizer application and pest and disease management. The value of coefficient of determination ( $R^2$ ) indicated an 89.1% variation in the output of cassava farmers explained by the inputs indicated in the regression model implying that, there is a positive and significant relationship between the inputs and output. The results also indicated that labour, fertilizer and farm size were significant at 1% level of probability while ICT use was significant at 10%. Further findings showed that finance (78.3%) was the major constraint associated with ICT use. Recommendations were made on strengthening the use of ICT especially contemporary ones like the computer and internet among farmers for easy information sourcing which can boost agricultural production, improve livelihood and subsequently food security. This may be achieved by providing credit or subsidies and information centres like telecentres and cyber cafes through government assistance or partnership.

**Keywords :** ICT, cassava farmers, inputs, output

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