



## **FARM LEVEL ASSESSMENT OF POST-HARVEST LOSSES ESTIMATION AND MANAGEMENT OF YAM IN BENUE STATE, NIGERIA**

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### **ABSTRACT**

The study measured post-harvest losses of yam in volumetric and monetary terms and the determinants of post-harvest losses (PHLs) management capacities of farmers along diverse activities at the farm level in Benue State, Nigeria for four different production seasons. Using a multistage sampling procedure, 240 yam farmers were sampled and interviewed for the study. Empirical results showed that majority of yam farmers (80.42%) experienced substantial losses, ranging from 20% – 49.9% of their total harvest. Averagely, farmers recorded 43.57% loss of yam tubers on account of environmental and institutional factors especially, the erratic rainfall patterns and lack of improved storage facilities. The post-harvest management index indicated that farmers had the capacities to store, consume or sell about 58.5% of their total annual harvest. The prime causes of such losses were attributed to environmental ( $\bar{X} = 3.67$ ) and microbiological ( $\bar{X} = 3.20$ ) factors, duration needed to store yam profitably ( $\bar{X} = 2.88$ ), mechanical damage ( $\bar{X} = 2.75$ ), poor marketing ( $\bar{X} = 2.68$ ), and inappropriate transportation ( $\bar{X} = 2.65$ ) systems. Further, the degree of PHLs management capacities of the farmers' increased consistently, positively and significantly at P 0.01 level of significance, with increase in the age, household size, annual income, access and sources of agricultural credit and the number of PHL management technologies adopted, but rather reduced significantly with years of farming experience and extension contacts. To enhance the post-harvest management competence of farmers in Benue State, the capacities of the farmers should be strengthened to access agricultural information, including geo-informatics, and financial services that can be used in minimizing the incidence of post-harvest losses.

**Keywords:** Assessment, Farm level, and Management, Post-harvest losses, Yam.