## INSTITUTION, GEOGRAPHIC REGIONS AND TECHNICAL EFFICIENCY: EVIDENCE FROM SMALL FARMS IN NIGERIA

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## ABSTRACT

The agricultural sector in Nigeria has been plagued with challenges. One identified constraint is the limited knowledge on factors influencing efficiency of small farms by policy makers. In this context, we aggregate the determinants of technical efficiency into institutional and geographic factors. This paper adopts the Bayesian method to measures the impacts of these components on technical efficiency. Empirical measurement is demonstrated using 2010/2011 Household Survey dataset for Nigeria. The results show that the average crop output in value of per hectare is approximately N 143,000 (\$878.65). The sizes of farm were small with majority smaller than 2 hectares; which are predominantly cultivated using family labour. Further we found that all production variables considered were significant at 1 percent while farms were inefficient up to 16 percent on average. We find that selected institution variables (land ownership) and Geographic location variables significantly influenced the level of efficiency.

Keywords: Bayesian, Technical efficiency, Small farms, Nigeria.