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# Application of Data Envelopment Analysis to Evaluate Farm Resource Management of Nigerian Farmers

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**ABSTRACT** The present study applied the cost approach constant returns to scale and variable returns to scale data envelopment analysis models to evaluate farm resource management of Nigerian farmers using 393 rural farmers in Benue State. Scale efficiency among the respondents varied substantially ranging between 0.002 and 1.00, with a mean scale efficiency of 0.70. The study showed that some of the decision-making units have scale inefficiency, suggesting that the decision-making units are not all operating at the optimal scale. Most of the respondents operated very far away from the efficiency frontier. The overall technical inefficiency among the respondents resulted more by scale inefficiency compared to pure technical inefficiency. Allocative inefficiency is worse than technical inefficiency, implying that the low level of overall economic efficiency is the result of higher cost (allocative) inefficiency and scale inefficiency (operating at less than optimal scale size). Solving allocation and scale problems is critical for improving farm resource use efficiency of Nigerian farmers.