



## **Productivity and Resource use Efficiency in Amaranthus Production in Yewa North and South Local Government Areas, Ogun State**

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### **Introduction**

Amaranthus production (leafy vegetable) plays a crucial role in enhancing food security and economic stability in Nigeria. This study assessed the productivity and resource use efficiency in Amaranthus production in Yewa North and South Local Government Areas, Ogun state, Nigeria. This study stemmed from such findings that revealed that post-harvest loss from the farm to retail level, especially in the dry season had been on the rise, thereby increasing the cost of food items, rapid reduction in supply of timely and fresh vegetables to consumers which eventually has discouraged both farmers and marketers. This study was carried out to know how productive Amaranthus production is in the study area, and how efficient are the inputs used during the cost of production.

### **Materials and methods**

Primary data were obtained through a well-structured questionnaire and interview schedule. A purposive sampling technique was used to select one hundred (100) respondents. The data collected were analyzed using descriptive statistics, Total factor production (TFP) analysis, and Benefit-Cost Ratio (BCR) analysis.

### **Results and discussion**

Result revealed that 87.7% of the respondents were male. The 50-59 years age range had the highest proportion, occupying 39.5% of the population. 96.3% of the respondents were married, 45.7% had secondary education, 44.4% had more than 20 years of farming experience, and 65.4% had at least 6 household members. The total Factor Efficiency result revealed a value of 1.18, which means that for every unit of input (₦ 1.00 worth of resources) utilized, 1.18 kg of Amaranthus was produced, signifying an effective input-output conversion ratio. Furthermore, Benefit-Cost Ratio (BCR) result revealed a value of 4.2 which means that for every ₦1 invested in production of Amaranthus, farmers obtained a return of ₦4.26 and this signify that Amaranthus production is both efficient and highly profitable.

### **Conclusion**

The study concludes that farmers should use high quality seed and machineries to increase Amaranthus productivity.

**Keywords:** Amaranthus production, productivity, resources, and total factor productivity