

Population Growth and Food Production in Nigeria

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Degree (MSc) in Economics**

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Certification

This is to certify that Ifetolase Dorcas, OJENIYI with Matriculation Number LCU/PG/001478 carried out this research work titled “Food Production and Population Growth in Nigeria” in the Department of Economics, Faculty of Management and Social Sciences, Lead City University, Ibadan, Oyo State Nigeria, for the award of Master’s Degree (MSc) in Economics and that this has not been previously submitted.

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Dedication

This thesis is dedicated to the Almighty God, the one who gives me hope and courage at all times.

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Even though the above-mentioned institution and persons have assisted in this research work, I alone stand responsible for errors, if any, found in the work.

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Abstract

This study explored the interrelationships between population growth and food production in Nigeria. The objectives were to analyze the asymmetric causal relationship between population growth and food production, examine the asymmetric effect of population growth on food production and access the response of food production to shocks in population growth in Nigeria. These were estimated using secondary time series data from 1981 to 2021 which was subjected to statistical estimations. The study adopted the asymmetry causality test based on Toda Yamamoto method, nonlinear ARDL (NARDL) and impulse response function and variance decomposition. The findings reveal that population growth and food production in Nigeria exhibit a significant bi-directional causal relationship. Positive and negative population growth both revealed a one-way causality on food production. The labor force participation rate is also positively correlated with agricultural output, indicating that a larger labor force engaged in agriculture leads to higher productivity. The short-run asymmetric estimates demonstrate that positive population growth has a negative impact on agricultural output, while lagged positive and negative population growth have positive effects. In the long run, deposit money bank credit to agriculture and government expenditure as a percentage of GDP show marginally significant effects on food production. Shocks in population growth, labor force participation rate, government expenditure, deposit money bank credit to agriculture, inflation rate, and exchange rate have varying effects on food production in Nigeria. The study concludes that population growth has a significant impact on food production, both positively and negatively, emphasizing the need for sustainable population management strategies. The labor force participation rate and other macroeconomic indicators also play crucial roles in influencing food production. It was recommended that policymakers should implement strategies that promote agricultural output and maintain stable population growth.

Keywords: Population Growth, Food Production, Agricultural Output, Labour Force Participation.

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