Chapter 35
A Comparison of Population Growth Rate and the Rate of Increase in Food Crop Production in Africa

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ABSTRACT

Millions of people in Africa require sufficient food for healthy living. However, inefficient farming practices are making a lot more people hungry and poor. Simultaneously, the population keeps on increasing. The legitimate question that this study seeks to address is how the production capacity can meet the needs of the increasing population in the future. The chapter examines the increase in population growth and its consequences on food production with the consideration of the theory of population growth by Thomas Malthus. The result of time series data analyzed shows that population growth is increasing at a high rate whereas food production growth is increasing at a decreasing rate. The trend seems to confirm that the Malthus population theory is still relevant in Africa. The study recommends that stewards and policymakers invest immensely in agriculture to improve technology, skills, methods, and know-how to boost food production and invest in women in adopting family planning to decrease population growth for the solution of food deficiency.

INTRODUCTION

The inception of the agricultural revolution has brought about a significant change to the world food supply and this, in turn, made the population theory of Malthus irrelevant in the developed nations where agriculture has seen a tremendous improvement. The drastic improvement in the methods of crop cultivation has brought about a significant improvement in agricultural yields. The growth of total world food production has been increasing over the years.

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In general, the growth in food production exceeds the growth of population (Yanjiu, 1982). Despite the increases in world food production, the supply of food within countries are not the same. There is an inequality in food supply among countries around the world, Bellis (2017). Food production is continually increasing in abundance in the developed countries. Some of the food produced is sometimes deliberately disposed of as waste. But the situation is different in developing countries. The food crops produced in developing countries is deficient. The reason is that developing countries are still using the old traditional hand tools and depending on physical weather conditions (Mendelsohn, 2008). The farmers are mostly illiterate peasant farmers who use their human power on the farms. (Temesgen, 2017) Lack of knowledge and technology aggravate the extreme weather prevalence in many developing countries to decrease food production (Ochieng, Kirimi, & Mathenge, 2016).

The quality and quantity of food supply and consumption by the world population are different between social classes within countries and between countries. World Bank statistics show that one billion or more of the world population are suffering from malnutrition and that many of these people are living in developing countries, including Africa.

Foodgrains are very important in the world. It is produced and consumed in many countries. Man consumes about half of the grains produced in the world. Wheat flour bread is one of the staple foods eaten by people around the world. Rice, corn and wheat are the most common staple foods that are mostly consumed by man and animals on earth.

In developed countries, about half of the increase in the food supply is from food grains. They follow the policy of reducing farmland to maintain stable grain prices, especially in Europe. In 1981 the world population growth rate decreased from 2% to about 1.7%. Birth control and an increase in the food supply has brought new hope to the world's problems of overpopulation and food supply.

To this date, cereal food prices remain unstable and keep increasing. The rising costs of cereals have become a huge economic problem for many developing nations. Policymakers have realised the importance of boosting agriculture productivity as a solution to the problem. In this respect, many of the countries in the developing world are adopting strategies to motivate the numerous small-scale farmers to increase grain production. Farmers are provided with agriculture inputs to increase yields. Subsidised equipment is being made available, and the peasant farmers are being encouraged to adopt modern farming techniques to increases the arable land area yield and to enhance their methods of cultivation to decrease postharvest loses. However, the farmers are facing problems of funding and harsh weather conditions. Water supply and agricultural inputs like fertilizer and pesticides are woefully inadequate. The high population growth in the developing countries turns to neutralised and diminished the endeavours of the farmers in their struggle for high productivity. In recent years, developing counties have realized the importance of population growth measures and applying it to augment the progress towards the achievement of food sufficiency.

The recent population estimates show that rapid population growth rate in Africa will eventually impact negatively on the development efforts, (Boadu, 1994; Ofosu-Amaah, 2006). This consensus usually stems from economic development, Benneh (1987). Often, writers associate a nation's development mainly with economic growth. Nevertheless, population growth has some amount of effects on economic growth and development.

The paper focuses on the relationship between population growth and economic growth in Africa with food crop production. The paper examines the trend in population growth in Africa and its consequences on food grain productivity, taking into consideration of the fact that corn, rice and wheat are the most important and most common food grains consumed in the world.