

Balance Between Environment, Population and Food Supply in Developing World: A Sociological Appraisal

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Received Date: 14 February 2022 | **Accepted Date:** 05 March 2022 | **Published Date:** 15 March 2022

Citation: Mohammad T Sheykhi. (2022). Balance Between Environment, Population and Food Supply in Developing World: A Sociological Appraisal. *Journal of Clinical and Laboratory Research*. 5(4); DOI:10.31579/2768-0487/078

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Abstract

From the view of sociology, the developing world is facing the problem of imbalance between the three variables of environment, population and food supply. Currently, a large number of countries in Africa, Asia and even Latin America are confronting it. Such a hazard usually leads to economic inflation, unbridled migration, density of population in urban areas, loss of active and fruitful earth in rural areas, losing the local currency value in trade interactions and many more. Such a situation is projected to increase in a multiplying manner in the years to come. So, under such threatening circumstances, adequate population policies need to be applied to prevent further escalation. Many countries have experienced famine. China for example, experienced a wide food shortage in 1961, in which over 30 million people died. Even in present modern time, many people within the African nations are starving. Many people in such countries destroy forests to earn their livelihoods.

Keywords: food crisis; food policy; total fertility rate; environment; sociology

Introduction

Sociology, investigating all the details of human society, assesses the tri-party relationship of environment, population and food supply with special reference to the developing countries. A majority of the countries are listed as developing, and yet within them there are some being known as the Least Developed Countries (LDCs) which are poorer than the others, usually in Africa. The developing countries are widely responsible for destroying the environment, creating pollution, deforestation, destroying rivers, polluting sea shores and many more. Such countries are also responsible for high birth rate and increasing population. While such a cycle ever continues, food productivity/ supply remains in short, and because of that, many people face food poverty, especially in Africa. Increasing number of people in developing world are confronting such challenges. Therefore, the developing world is widely in need of an everlasting cultural revolution to put away the problems appearing in their

societies, and in a way solve them. Shortage of food is leading to overall economic inflation in those countries--depriving them even of many non-food items. Sufficient, safe, and nutritious food that meets people's food preferences and dietary needs for an active and healthy life is the main objective of the present work [7]. Similarly, assets of a household including income, land, products of labor, inheritances, and gifts can determine a household's access to food [5]; [1]. The environmental impact of agriculture is the effect that different farming practices have on the ecosystems around them, and how those can be traced to those practices [8].

Food insecurity is caused by a variety of factors, including agricultural shortages, population imbalances, or government policies. Many parts of Africa, as part of the Third World, face food constraints and shortages. Factors such as agricultural efficiency, lack of necessary technologies, disproportionate population growth, and the state of government policies

and programs together have caused many African countries to face problems and weaknesses related to food production. This situation has physical, mental, social, economic and similar effects within these communities. This phenomenon is generally associated with malnutrition and starvation, and epidemics and increased mortality. Weak food production in African countries has led to these conditions. While many (contagious) diseases and epidemics have been eradicated from the world, Africa still faces a variety of such disorders; In a way, even new cases of Ebola and Zika have recently appeared in some parts of the continent. Following this, almost all continents of the world have experienced famine in a period of history. In the twentieth century alone, seventy million people worldwide died of food shortages, of which 30 million died in China between 1961 and 1958. Food shortages and disease transmission have had devastating effects on human societies such as famines in recent centuries. Following the development of industry and technology and the expansion of communications, this phenomenon has decreased to a minimum today. It is noteworthy that in the Horn of Africa region, including Ethiopia, Djibouti, Somalia and part of Kenya in 2006, the region's drought led to famine. These factors have generally led to food shortages and subsequent general famines in many countries in the region.

Method of Research

Methodology used in the present article is of qualitative type. In that, various paradigms have been used to find out about the facts regarding pandemics during the history. Qualitative research usually studies people, events or areas in their natural settings. In finding facts for the research, the researcher engaged in careful data collection and thoughtful analysis of what was relevant. In the documentary research applied for the present research, printed and written materials were widely regarded. The research was performed as a qualitative library-type in which the researcher had to refer to the relevant and related sources. In the current research, various documents were thoroughly investigated, and the needful inferences were made. The data fed by the investigator in the present article is hopefully reliable. Though literature on pandemics is very limited, yet the author tried to investigate many different resources in order to elicit the necessary information to build up the text.

The food crisis in Africa

Although parts of sub-Saharan Africa are rich in water and land, there is still widespread hunger and starvation on the continent, and Africa remains the poorest region in the world. African countries, which are

generally interconnected, have many similarities in terms of economic, social and cultural conditions. The African continent is facing a shortage of food production today, which has negatively affected the quality of life of its citizens on the continent; In a way, a significant part of the population in this continent does not have the minimum food on a daily basis. Therefore, agricultural development and effective exploitation of agricultural resources in this continent should be a priority in the plans. While African countries enjoy a fishery and fishing industry along the waters and oceans, Central and Central African countries do not have this natural advantage, which in turn has added to their poverty and food shortages. Unexpected life expectancy in many African countries has been driven by external support, such as the Bill & Melindagit Foundation, in which the public health system has improved [2].

Rapid economic growth and reforms in the education and health sectors over the past decade have still failed to eradicate hunger and malnutrition in that part of the world. While different economic and cultural development projects have been implemented in the continent, at the same time, high population growth and lifestyle changes have always kept poverty and hunger in the continent stable; In a way, different age groups, including children, are still exposed to many diseases and deaths at this time.

While the causes and side effects of this condition are significant, they also require treatment suggestions and policies. The African continent, given its small population growth and need for food, must always adopt constructive and legal policies in the food industry and agricultural products. In this way, the dimensions of the food crisis on that continent can be gradually reduced.

Approximate causes

Persistent causes of food poverty in Africa include low agricultural productivity, poor physical infrastructure, and so on. Many African countries are facing problems of drought, water scarcity, roads and communication facilities, educational poverty and increasing illiteracy and the like. Therefore, the mentioned infrastructure should always be provided in order to reduce chronic poverty in that society as much as possible; otherwise, the problems caused by poverty will affect the next generations in that society. The development of the African continent must also be provided in such a way as to increase their position and gross national product. In this way, African countries will be able to invest in various sectors of education and welfare, production, services, health and other fields. Unstable food systems, vulnerabilities to abnormal weather conditions, volatile food prices, and local and regional conflicts are among the causes of food problems and poverty on that continent. African

countries generally face less than \$ 2 a day in per capita income due to weak industry and economic development. Such low-income financial weaknesses do not provide the population in these countries with the opportunity to meet their food and welfare needs. At the same time, these countries are generally heavily dependent on international aid and the provision of such services and food from outside their own countries. In such circumstances, a significant proportion of the population faces malnutrition and food shortages. This situation has led to high mortality rates for different age groups, and finally the life expectancy index in such countries is affected by poor nutritional status, less than 50 years. Economic poverty in African countries has also led to many local and regional conflicts.

For decades, governments and international organizations have forgotten or even damaged Africa's rural and agricultural development. Because African countries generally do not have stable governments, it has led to a decline in the continent's rural and agricultural economies. As a result, the African continent has, on average, less than its global standard of nutrition. In some cases, even the per capita caloric content of food is estimated at about 200 units (calories); while the standard is about 2500 calories. This lack of nutrients affects their quality of life and life expectancy index.

The image of industrial societies

In contrast, the agricultural sector in developed societies has always been supported, and subsidized / subsidized. This means that governments in industrialized societies provide comprehensive support to farmers to encourage and promote agriculture. Food security is a fundamental concept for complementing development strategies, in which individuals must have adequate and consistent access to food for a healthy and active life [6, 11]. However, African countries cannot provide such support to their agricultural users. In general, the African continent needs more investment and more education in agriculture and food production. Hence, Africa's agricultural sector and rural economy are in dire need of fundamental solutions. Hence, such countries need to create educational, health and similar infrastructures in order to prevent the crisis from spreading in their countries. In addition to the causes of food poverty in Africa, there are other key factors, including wrong policies, weak institutions and failed markets. Because many African countries do not have stable governments and policies, they themselves influence economic trends and pursue development plans in such societies; In a way, the scope of poverty in these societies is getting wider every day. Hence, the institutions of government, the economy, the family, and the like are very weak and more or less inefficient.

One of the factors of countries' progress today is market dynamics, successful markets, successful trade and the like. Many African countries do not have satisfactory success in this regard. Hence, many of the weaknesses of the Third World can still be seen in African countries. However, many Asian Third World countries have enjoyed unprecedented progress and success in recent decades; like many East Asian countries (Malaysia, Vietnam, South Korea) and other countries in the East Asian region.

Therefore, boosting and improving the level of agricultural harvest in Africa should be a top priority. Optimal harvesting of agricultural resources and fields is known to guarantee improved nutrition, food availability and improved quality of life in African societies. Therefore, the continent of Africa, given the rapid growth of its population, should give significant priority to improving the exploitation of its agricultural resources. It is largely dependent on industrial development and the use of advanced agricultural technologies. It is noteworthy that the FAO "World Food and Agriculture Organization" has provided a lot of assistance to African countries in this field and so far. While support for the agricultural sector is very important in developed countries, this trend / support is low and weak in developing countries [3].

African countries need other industrial, economic, transportation, water resources, etc. infrastructure while upgrading their agriculture. Not only the African continent, but also the countries of the Third World should adopt and exploit such policies. This move itself can increase food supply, and increase the income of a large part of its population; That is, a population that is mainly dependent on agriculture; otherwise, a significant portion of the workforce will migrate to urban areas and services, which in turn will bring new challenges and problems. The prosperity of agriculture itself causes more economic dynamism to appear in the community and among the populations. This global movement lays the groundwork for economic dynamism in its macro form; That is, what leads to the greater well-being of these different strata. For most sub-Saharan African countries, eradicating poverty in agriculture is more important than anything else. Since the majority of the population of sub-Saharan African countries is located in rural areas, improving the agricultural situation in all parts of the country can greatly reduce the extent and level of general poverty; That is, a movement that contributes to the health and well-being of the population. This movement will prevent the spread of involuntary migration to urban areas.

Food policy

Adopting policies based on food systems (food production) is much more effective and important than shocks caused by tensions, droughts, floods

and rising food prices. Third world countries, especially in the African region, should prioritize achieving advanced food production policies in their food programs. While natural disasters such as drought, etc. are inevitable in various parts of Africa, and in a situation where the population of the region is constantly increasing, the adoption of progressive economic-agricultural policies can itself provide many

opportunities for the continent. In recent years, many Chinese companies and other developed countries have invested in agricultural products and raw materials on the continent. It should be noted that the African continent must first of all strengthen its educational and national structure, so that it can exploit the potential resources in different countries of the African continent.

Europe		Sub-Saharan Africa	
Country	Harvest (kg / ha)	Country	Harvest (kg / ha)
Morris	7664	Belgium	10335
Reunification country	7000	Spain	10005
South Africa	2876	Italy	9144
Ethiopia	725	Austria	9105
Guinea-Bissau	2370	Germany	9085

Source: www.garminder.org (Gaminder Agriculture)

Table 1: A Comparative Look at Corn Harvest in Selected Countries 2007

Public solutions and interventions can include the establishment of insurance facilities and services, the establishment of food storage infrastructure, and the provision of food delivery to those in need. In addition to the need for educational centers, the African continent also needs to provide food for older school groups. It is noteworthy that some third world countries, including India, have provided food (schools with lunch) to encourage more education among the lower middle class. In this way, many children and adolescents become interested in attending

school just to get a hot meal. If African countries have such an opportunity, they can further strengthen their education among the vulnerable and the weak.

They must provide the conditions for the improvement of the economic infrastructure in this continent in order to fundamentally prevent the emergence of possible challenges in that continent and from that continent.

Country Name	Total fertility rate		Life expectancy of both sexes	
	1970	2013	1970	2013
Algeria	6.5	3.4	44	57
Egypt	5.9	3.5	52	71
Tunisia	6.4	2.2	51	75
Ivory Coast	7.9	4.9	44	51
Ghana	7	4.3	49	61
Morris	6.8	4.1	49	62
Nigeria	6.5	5.6	41	52
Ethiopia	7	4.1	43	63
Kenya	8.1	4.3	52	62
Tanzania	6.8	5.3	47	61
Chad	6.5	6.6	41	51
South Africa	5.6	2.3	53	60
Japan	2.1	1.4	72	83
Iran	6.2	1.8	51	74

Source: World Population Data Sheet 2014.

Table 2: Total fertility and life expectancy of several selected African countries in two periods

According to the table above, fertility status and life expectancy index have changed significantly all over the world, even in African countries, over the last four decades. For example, Algeria in 1970 saw a total fertility index of 6.5 children on average per woman. After about 40 years, the total fertility rate in that country is almost half; that means 3.4 children have decreased. In the regions, the life expectancy index in the mentioned country has increased from 44 years in 1970 to 57 years in 2012. This

means that Algeria and other countries in the African region have a better chance of survival. African countries need more food for their citizens; That is, those who will have an average life expectancy in the coming years of even more than 71 years, such as in Egypt. Unexpected life expectancy in many African countries has been driven by external support such as the Bill & Millanda Gate Foundation, in which public health systems have improved [2].

Therefore, African countries, due to their weak infrastructure, always have to implement more advanced plans for food production; otherwise, they face unprecedented challenges. One of the African countries that is in a better situation than other countries is South Africa, where many development projects have been implemented in the sectors of population, health, food production, agriculture, education, etc., and thus the country distinguishes it from other African countries. In contrast to Japan in Asia, as reflected in the table above; That is, a country where the total fertility rate is about 1.4 children and life expectancy for both sexes is estimated at 83 years. Therefore, in order to achieve the development of African countries, one should always use the models of countries such as Japan. At the same time, Iran has also experienced unprecedented demographic changes over the past four decades; In a way, the life expectancy index has increased from 51 years in 1970 to 76 years in 2013 [13]. The figures in the table above can be widely analyzed from an economic and social point of view.

Conclusion

Many countries of the developing world do not have a balanced triangle of environment, population, and food production/ supply. Such a state forces people to suffer food shortage. This situation is widely observed in Africa. Such countries need to adopt certain policies to organize their food access. Adopting policies toward education highly and eventually affect food status in a country. Literacy provides the people with positive approaches toward better food policies, production and use of food, etc.

Education also affects the tendency toward fertility, and child birth. In this way, some sort of birth control comes into effect. Similarly, education creates the feeling of preservation of environment in any society. Such a feeling was awakened in industrial world about two hundred years back. Lastly, it should be noted that countries with food poverty should first of all strengthen their educational capacity, to exploit the potential resources in various contexts.

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DOI: [10.31579/2768-0487/078](https://doi.org/10.31579/2768-0487/078)

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