

THE HUMANITARIAN ASPECT OF ISLAM AND THEORIES OF DISORDER OF THE POPULATION GROWTH

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ABSTRACT

This paper addresses the issue of the disorder resulting from lack of balance in the population growth, resources, and abilities. The population growth has a negative implication when there is a decrease in the population growth, whereas the positive aspect refers to the increase in the population growth. The rate of the population growth implies negative and positive issues and these represent a challenging aspect for several countries in the world. The social and political perspectives vary in their dealing with the imbalance of the population growth based on several social, economic, religious, and ethnic factors, as well as the philosophical perspectives of leaders and researchers. Hence, this paper addresses these views in order to explore the disorder and their lack of humanity. In addition, this paper will present the humanitarian and Islamic perspectives towards such disorder. The findings introduce a logical and a mathematical procedure to deal with the disorder in the population growth and calculate its effect on the communities. Moreover, the findings present the humanitarian and Islamic perspectives that ensure the right of living for a human and guarantee that this right will not be attacked in any form.

Keywords : Population Growth, Islamic Ethics, Theories of Disorder, Humanity.

1. Introduction

The population growth is considered among the numerical criteria that are expected to be a significant factor in the economic vision and the future plans for the development of the services sector of the countries that have a serious vision to achieve development and establishment (Coale & Hoover, 2015). Since the middle of the last century and after the initiating of the United Nations, data about the population have become significant in the planning procedure in several countries that have been changing into an organized and logical environment that cope with the development and modernism. Though the rate of the population growth in the world is still within the normal limits that does not exceed 5%, in some cases, the rate of the population growth has showed a sort of disorder in many countries due to wars. Consequently, these wars have forced people to migrate from their countries towards other countries. The neighbouring countries of the conflicting countries usually have the highest number of migrants. As a result, this creates a kind of imbalance in the population growth of regions that suffer from wars and conflicts (Bernard, 2014). In such cases, the rate of the population growth becomes unstable that is specifically abnormal. This results in several dimensions that are challenging in the conflicting region and the world, these challenges require logic that refer to them using numerical formulas that can help in designing a future vision in order to have solutions for these challenges. Some countries benefited positively from the obligatory migration, whereas other countries confronted challenges and crises because of this migration (Black, 1994; Castles, 2007; Warner, 2010; Park, 2015, Crawley, 2017)

Though the negative population growth is a problem that is faced by the countries of the European Continent, specifically after the Second World War, whereby the number of the people decreased, and the rate of the population growth decreased, these countries and through the community and the economic measurements and other criteria could overcome this crisis by means of the migration programs, the development programs, and managing the balance between the number of the population and the obtained benefits. On the other hand, there are countries that had increase in the rate of the population growth, but they confronted several and varied challenges. However, the biggest challenge lies in the high population growth that has a positive value, specifically the sudden and unexpected growth rate according to certain conditions. This growth implies effects with several dimensions on the social and economic settings and the population demography of these countries. In the past centuries, these dimensions were limited to the availability of the food. However, in the present century, these dimensions involve several aspects that should be addressed in order to clarify them, demonstrate the resulting effects in either the positive or the negative side, and lay down logical references for such dimensions.

This actually what the present study has achieved which was based on illustrating the deficiency in some theories which focus on the population growth and the major equations in measuring the rate of the population growth which do not correspond with the perspectives of the heavenly religions generally and the concluding religion represented by Islam in particular.

This paper consists of the first section which involves the introduction that refers briefly and explicitly to the topic. Section two explains some theories related to the disorder of the population growth. Section three involves a mathematical logic for the major equations that deal with the disorder and its resulting effects. Section three also involves applying a case represented by numbers that simulate a numerical reality and the challenges that are faced by the regions that suffer from a disorder in the population

growth. In section four, the focus implies a demonstration of the humanitarian perspectives of Islam towards the issue of the population growth. Finally, a brief review of the findings of the study is presented.

2. Theories of Population Growth

The population growth is defined as the value that expresses the size of the change in the number of the population whether it is positive or negative. This value was not constant throughout time, whereby it cannot be certainly determined that the population growth was constant or it changes based on a constant quantity. If the population growth is constant, the negative value which represents a decline in the number of population would reach a certain point, whereby the number of the population is zero within a certain period of time. In addition, if the positive value that represents an increase in the number of the population is constant, the number of the population in the world will be countless. Both hypotheses that imply a constant decrease or a constant increase would logically result in a disorder. As a result, several theories were suggested by researchers in this domain. These theories attempt to calculate the population growth and the rate of the population growth by means of varied mathematical equations that correspond to the real number of the population throughout the three dimensions of time (past, present, and future). The followings are the most popular theories:

- a) Malthus' Theory clarifies the logic that links the population growth with the quantity of the available food in the world and the quantity of the agricultural products and the ability of the earth to cope with the increasing number of the population by means of the association with the rate of the birth, death, and marriage. It was shown that number of the population was increasing exceeding the quantitative products of food. In order to restrict this disorder naturally, wars and famine were made (Malthus, 1798).
- b) Von Foerster's Theory explained the population growth by means of equations associated with constant values that are not linked with factors that cause changes (Von Foerster et al., 1960). Their study included the equations of the population growth by means of setting constant conditions that are not associated with changing factors except time. This was within approximate values that guarantee the success of the equation for a certain period of time within the three dimensions of time. The equation is as follows:

$$N(t) = \frac{215000}{(t_0 - t)}, \text{ where } N(t) \text{ Population (millions) at year } t \text{ and } t_0 = 2026.87 \quad (1)$$

The descriptive implication presented by the study of the future history is based on a numerical imitation of a previous database which was considered a significant contribution to accept the paper. This paper represents the human curiosity to know the future, specifically the Judgment Day. It is clear that this equation considers the differential solution of the equation $\frac{dN}{dt} = \frac{N^2}{215000}$. Despite the efficiency of the previous theories at the beginning, studies referred that it presented accuracy in which the rate of the error is (1×10^{-16}) (McEedy and Jones, 1978; Biraben, 1980).

However, in spite of this accuracy, this equation could present a simulation of future that doesn't go beyond 2000 A.D. This led researchers to look for more accurate theories based on other perspectives. However, this equation (1) has lost its logic, whereby time guarantees clarifying the human errors which are based on limited and explicit facts. Mathematically, this equation's focus doesn't correspond with the actual values of the number of the population at the end of the last century. Table 1 demonstrates a comparison of the efficiency and inefficiency of equation No. (1) within a time series extending from 1950 to 2027.

Table 1. Numerical Values to Compare between Theory (1) and the Real Statistics

NO	Year	Theory (Population, million)	United Nation (Population Division) World Population Prospect: The 2016 Revision(million)	Case of Compatibility
1	1950	2761011	2525149	Strongly
2	1955	2950459	2758315	Strongly
3	1960	3167820	3018344	Strongly
4	1965	3424657	3322495	Strongly
5	1970	3721010	3682488	Strongly
6	1975	4073512	4061399	Strongly
7	1980	4491330	4439632	Strongly
8	1985	5025712	4852541	Strongly

9	1990	5677317	5309668	Strongly
10	1995	6540918	5735123	Strongly
11	2000	7714388	6126622	Strongly
12	2005	9400961	6519636	Weakly
13	2010	1203133	6929725	Very Weakly
14	2015	1670551	734972	Very Weakly
15	2020	2731893	790000	Very Weakly
20	2025	7491289	850000	Very Weakly
21	2027	Doomsday	870000	Very Weakly Irrational

The last theory considers the increasing issue a constant logic within the domain of the positive value, thus resulting in a sort of disorder by presenting numbers that do not correspond with the ability of the earth towards this growth. This theory estimated that the number of the population is countless. This shows clearly the failure of the equation No. (1) due to its association with a mathematical procedure that doesn't consider any actual factor affecting the population growth or the disorder of the population growth in any of its value, and this makes its results illogical.

It is clear that the United Nations' estimations of the population number focus on statistics that reveal an increasing number of the population in the world with a rate not exceeding 5% annually. However, this increase is controlled by several factors that affect the calculation of these numbers, including the rate of birth and death.

- c) Kremer's Theory associated the rate of the population growth with the rate of the technological development based on a study conducted by Malthus (1798) as well as Aghion and Howitt (1990). Kremer's Theory is presented as follows:

$$G = rN^a T \tag{2}$$

G represents the whole global product, *a* and *r* represent constant values, whereas T refers to the technological development. Based on this logic which corresponds with the Theory of Von Foerster et al. (1960) within the domain of the given values, it is not certain that this theory can be constant within general formulas of the population growth in the world. In spite of its logical measurements by including factors that affect the population growth, linking the technological development with the number of the population or with the products contrasts with several aspects of the present conditions of several communities in several countries. It can be noticed that the high population growth in some countries does not cope with the technological level of such communities. In addition, supposing the positive effect of technology on the population growth is not in line with the level of differential human relationships. In other words, it is illogical to consider that the technological development in a certain country will result in an increase in the number of the population. Consequently, it is difficult for this theory to be reasonable. This is demonstrated in the statistics of the United Nations in countries like Lebanon, Niger, Oman, etc, whereby there is a clear difference between the actual and productive values due to having inventors and the technological development and the population growth. Hence, this relationship cannot be described as correlated.

3. The Logic of the Disorder Theory and the Population Balance

In this section, there is a description of deriving a new logic of a theory that is associated with the disorder and the population balance, and considers the variables affecting actually the real rate of growth. Theories that estimate the number of the population, the rate of the population growth or the population density within a real logic are based on shared factors in their procedures, where they involve:

- The exact calculation of the birth rates $\frac{dB}{dt}$.
- The exact calculation of the death rates $\frac{dD}{dt}$.
- An in-depth study of the factors affecting the birth rates $F_B = \{v_1, v_2, \dots, v_n\}$
- An in-depth study of the factors affecting the death rates $F_D = \{\omega_1, \omega_2, \dots, \omega_n\}$

Consequently, the main logic to calculate the rate of the annual population growth $\frac{dP}{dt}$

is to determine the difference between the birth rate and the death rate within one year $t \in [0, 1]$ and this description is represented by means of the following mathematical formula:

$$\frac{dP}{dt} = \frac{dB}{dt} - \frac{dD}{dt}, \text{ Where } \left. \frac{dB}{dt} \right|_{t=0} = 0, \left. \frac{dD}{dt} \right|_{t=0} = 0 \quad (3)$$

It is clear that solving the previous mathematical equation presents the quantity of the growth within limits that ignore any factors that affect the percentage of the birth rates and death rates:

Through making integration for the equation No. (3):

$$\int \frac{dP}{dt} = \int \frac{dB}{dt} - \int \frac{dD}{dt}. \text{ this results in the following equation:}$$

$$P(t) = B(t) - D(t) \quad (4)$$

The numerical logic of the statistics of the number of population in the world and the countries that suffer from war demonstrates that the procedures accompanying the wars and the conflicts lead to changes in the direction of the population growth from the positive value to the negative one in the region of the conflict. On the other hand, the opposite happens in the regions of the migration and asylum and the global level of the growth, where these procedures involve:

- The global siege of the countries by means of food and basic commodities under the pretext of the global conflict.
- The siege of the migrants through abstaining from sheltering them and putting them in the refugees' camps.
- Lack of support and health care in a way that involves only the basic needs in the conflicting areas.
- The demographic changes due to the obligatory migration to the neighboring countries of the countries of conflict, and this results in social and economical crises leading to the alteration of the communities including conflicts and the spread of the epidemics.

By reviewing the previous theory, it is clear that there is a logical requirement that is unfair to limit the population growth in any way. In the first theory, the necessity to limit the population growth is in line with the inability of the earth to encompass the number of the population one day. In the second theory, the population growth is increasing terrifically, whereby the authors of the theory presented a description of the Judgment Day and the end of the globe. The third theory adopted the same logic stating that the development of the technology in the world creates a danger of the high population growth when the level of the technological development continues as it was at the end of the last century. However, this logic entails the danger of associating the high rise of the population growth as a negative effect of knowledge and development. These negative perspectives of the association between the increase of knowledge and the population growth represent a basis for introducing wrong solutions to control the population growth through creating wars and facilitating the spread of epidemics and diseases. However, this is illogical and contrasts with the Islamic religion in protecting the human life. The Islamic religion is based on basic concepts that guarantee the human life and it opposes an individual, community or international action that is against the human life of an individual or the community. Hence, the Islamic religion opposes the ethnic and sectarian discrimination and all forms of terrorism. Therefore, any attack on the human life is described as a kind of terrorism or a terrifying behavior that contrasts with the Islamic religion. In the previous theories, the disorder occurs due to the continuous effect of the population growth as it was in the 90th of the last century. That is, the number of the population increased sharply in a way that exceeds the efficiency of the world for the population. The logic of encompassing does not refer to the size of lands, rather, it refers to the ability to provide this huge number of population with products to stay alive. It is logical that the policy, the economy and the international relations are associated with the benefits and the intellectual vision of the leaders in the world. When such theories are supported and adopted by international leaders, it is possible that it will result in a danger towards their vision to achieve natural balance in the world through wars and the ethnic discrimination as a sort of perception that opposes the equality between the human races.

The following represents a series of deriving the general equation for the logic of the population growth and the relationship between the population growth and the disorder:

The actual value of the birth rate can be presented through the following formula:

$$\frac{dB}{dt} + \beta \quad (5)$$

β represents the value of the disorder that can be positive or negative.

The actual value of the death rate can be presented in the following formula:

$$\frac{dD}{dt} + \alpha \quad (6)$$

Where α represents the value of the disorder that can be positive or negative. It is noticed logically that the added value α or β are associated with the factors mentioned previously, and these values are the percentage of the original values of the birth value for α and the death value for β . Based on the abovementioned, the mathematical rates are formed as follows:

$$1:- \alpha = \varphi(B(t)), \varphi \in \square . \tag{7}$$

$$2:- \beta = \gamma(B(t)), \gamma \in \square . \tag{8}$$

In the equations (7) and (8), the disorder can be described according to the value of φ and γ , whereby the disorder starts when:

- 1: $\varphi \neq 1$ it is a value that affects positively the growth rate when $\varphi > 1$.
- 2: $\gamma \neq 0$ it is a value that affects positively the growth rate when $\gamma < 1$.

In addition, the value of the disorder is associated with the stability of the country before the occurrence of the population disorder, where it involves the economic factors, the food security, the infrastructure, the social structure, and the political situation. The stability condition of a country can be described as the refusal percentage to make a disorder or when the disorder is already available. In such a case, the value of the refusal is a value that forms reducing the disorder, whereas it is an added value to the disorder when the disorder originally exists. This can be clarified as follows:

The available services sectors that affect the stability condition of the areas can be symbolized c_i where i refers to the sector and the condition of the sector m_i . Hence, the following can be formulated:

$$m_i \in [0,1] \tag{9}$$

The most suitable value that can represent the natural stability of the sector is through $m_i = 1$.

It is possible to estimate the effect of the sectors' conditions on the stability condition of the population growth of a certain area as follows:

$$\sum_i^N Ec_i = 1, 0 \leq Ec_i \leq 1, \text{ where } Ec_i \text{ mention for Effect of } c_i . \tag{10}$$

It is through the equations (9) and (10), the value of the natural stability of the sectors in a specific area can be formulated through the following equation:

$$\sum_i^N m_i Ec_i \leq 1. \tag{11}$$

It is through the equations (9), (10), and (11), the following cases can be concluded:

- 1:- when the value of equation N. (11) equals 1, the condition of the sectors is generally within the natural stability.
- 2:- When the value of the equation No. (11) is less than 1, the sectors are in a disturbed condition that affects the area (country), whereby the value of the disorder is as follows:

$$\text{The value of the disorder} = \left| 1 - \sum_i^N m_i Ec_i \leq 1 \right| \tag{12}$$

The value of m_i as a real percentage of the sector condition is associated directly with the population growth, and it is represented through the suitability of the sector to the number of the population as follows:

- 1:- The suitability of the sector to the number of the population has the value $m_i = 1$.
- 2:- When the sector is not suitable to the number of the population, the value is $m_i < 1$, and the relative value of the decrease can be formulated in the following equations:

$$z = 1 - m_i . \tag{13}$$

- 3:- A case of refusal and surplus in the sector has the value $m_i > 1$, and the relative value of the increase can be formulated in the following equations:

$$f = m_i - 1. \tag{14}$$

To establish balance between the population growth and the conditions of the sectors, the following cases must be fulfilled:

- 1:- The balance between m_i , φ and γ .

- 2:- The balance between z in the equation No. (13) and φ .
3:- The balance between f in the equation No. (13) and γ .

This balance cannot be found through the logic of the philosophical theories which do not correspond with the principles of protecting the human life. The theories (a), (b), and (c) excluded the humanitarian dimension in their logic to establish balance through the philosophical visions and racist tendencies that aim at keeping the balance within the logic of their existence and the extinction of others. The balance that is based on the humanitarian principles involves the expansion in building the earth through effective exploitation of the available resources for the benefits of man and the effective employment of the human resources and qualifications to achieve a better life for man. In addition, there is a need to focus more on using technology to achieve peace in life.

4. The Islamic Vision of the Population Growth

To create a natural balance of the population growth cannot be based upon on wars and ethnic discrimination . The humanitarian logic requires protecting the life of all human beings, and the issue of the population growth should be considered as outside the will of the human determination, whereby all people have the right to live without having limitations on the population growth. The actual disorder of the population growth takes place due to unexpected sudden growth of the population density in a certain geographical area due to natural catastrophes which lead to obligatory migration or due to wars and conflicts in a country or within its regional area and because of this disorder:

- There is a lack of the basic elements for life such as water and food.
- The lack of the basic elements is not at the international level, rather it happens in the regions that have an increase in the population density.
- There is a low level of the technology in these disturbed regions, and based on this logic, there will be weak population growth which can lead to the extinction of the communities under the logic of the theories that connect knowledge and science with the population growth.
- When these disturbed areas pass through siege conditions, the local product affects the population growth which results in limiting the population growth. Thus these communities are directed towards decreasing population growth and evoking racist tendencies and wars.

It is clear that the first theory within its logic and its time agree with the logic of the war makers and racial discrimination in America against the Red Indians and the Black people which were known as the American Independence War 300 years earlier (Gorden, 2017) and in their logic of the human discrimination in Russia at the beginning of the last century and launching wars like the World War I and World War II. The three previous theories agree in their perspectives for encouraging to stop the population growth, but they did not consider a logical solution for the population disorder. Rather, they were a reason for the disturbance of the life of millions of people. In contrast to the three previous philosophical theories, the heavenly religions always ensure the right of life for the human being and protect this right. All the heavenly religions prior to Islam include texts that emphasize on this right. As for Islam, it was the concluding religion that involved all the humanitarian principles that guarantee the human life and protect it against any form of harm or attack. Islam has prohibited killing the individual or attacking under the excuse of creating an economical crisis. This is made clear in the Holy Qura'n (Verse 31 in Al-Isra Surah, Verse 32 in Al-Ma'idah Surah). Islam also prohibited corruption in the globe as was demonstrated in (Verse 33 in Al-Ma'idah Surah). In addition, Islam has illustrated that provision is a divine fate, and the ability of the earth to encompass the existence of the human beings and other creatures is also a divine issue as clarified in (Verse 6 in Hud Surah). In order to create a natural balance on the earth away from wars, Islam has encouraged cooperation, help and the coexistence of people from different races as clarified in (Verse 2 in Al-Ma'idah Surah, Verse 13 in Al-Hujurat Surah).

5. Conclusion

Historically and numerically, it is obvious that the second and the third theory opposed their numerical logic within a period that was accompanied by a series of wars witnessed by the world after a period of peace that lasted for half a century after the World War II. These wars started in the Middle East, Somalia, Yugoslavia, Afghanistan, and ended with the Syrian crisis, whereby people are suffering from injustice, oppression, killing, and humiliation. It is clear and definite that Islam with its true principles and clear texts in the Holy Qura'n and Sunnah is considered an essential basis to ensure justice, coexistence, and cooperation among people and is comprehensive for all the humanitarian principles on the earth. The real solutions to the problems of population growth that are compatible with the Islamic vision can be summarized as follows:

- Optimal exploitation of wealth.
- Providing a safe environment for production.
- Ensure the right to work.
- Ensure the right to health care.
- Ensure the right to live in peace.
- Ensure justice and equality.

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