# Sociology of population explosion and health security for Nigeria by 2050

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#### Abstract

Background: Nigeria with an estimated population of 198 million at annual growth rate of 2.6%, is experiencing demographic transition with serious implication for health security. The micro factors influencing population explosion are literacy, occupational status, age at first marriage, sex preference, social security and objections to birth control. While the macro factors include culture and tradition, patriarchy, pro-natalism (traditional urge to have descendant), resource sharing, poverty, age structure of the population, ethnicity and heterogeneity, religion, population and health policy. Situation analysis: By year 2050, Nigeria's population will increase from 195.4million to 278.8 million, which can either be a strength or weakness to the nation's growth and development. While life expectancy may increase from 53.76 to 69.3 there will also be increase in dependency ratio. Although, the SWOT analysis indicates that population increase may result in improved productivity and labour force strengthening, this may stampede development if policies and programmes are not tailored towards basic developmental indicators.

Conclusion: Short term intervention should include review of existing population and health policies to identify implementation bottlenecks; identify indigenous resources for effective intervention; and seek support for intervention by conduct stakeholders' engagement meetings. Medium term plan are development of programme of action and curriculum for capacity building. Long term plan targets policy formulation and legislation. Funding for the activities can be sourced from development agencies namely UNDP, UNICEF, UNFPA, EU, World Bank, Federal Government of Nigeria and Philanthropist.

**Keywords:** Population explosion, health security, forecast, Nigeria

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### Résumé

Contexte: Le Nigeria, avec une population estimée à 198 millions d'habitants, avec un taux de croissance annuel de 2,6 %, connaît une transition démographique qui a de graves conséquences pour la sécurité sanitaire. Les micro-facteurs qui influencent l'explosion démographique sont l'alphabétisation, le statut professionnel, l'âge au premier mariage, les préférences sexuelles, la sécurité sociale et les objections au contrôle des naissances. Alors que les macro-facteurs incluent la culture et la tradition, le patriarcat, le pronatalisme (envie traditionnelle d'avoir un descendant), le partage des ressources, la pauvreté, la structure d'âge de la population, l'ethnicité et l'hétérogénéité, la religion, la population et la politique de santé.

Analyse de la situation: D'ici à 2050, la population du Nigeria passera de 195,4 millions à 278,8 millions, ce qui peut être une force ou une faiblesse pour la croissance et le développement du pays. Tandis que l'espérance de vie puisse augmenter de 53,76 à 69,3, le taux de dépendance augmentera également. Bien que l'analyse SWOT indique que l'augmentation de la population peut entraîner une amélioration de la productivité et un renforcement de la main-d'œuvre, cela peut entraver le développement si les politiques et les programmes ne sont pas adaptés aux indicateurs de développement de base.

Conclusion: L'intervention à court terme devrait inclure un examen des politiques existantes en matière de population et de santé pour identifier les goulots d'étranglement de la mise en œuvre ; identifier les ressources indigènes pour une intervention efficace; et chercher du soutien pour l'intervention en organisant des réunions d'engagement des parties prenantes. Les plans à moyen terme sont l'élaboration d'un programme d'action et d'un programme de renforcement des capacités. Le plan à long terme cible la formulation des politiques et la législation. Le financement des activités peut provenir des agences de développement, à savoir le PNUD, l'UNICEF, l'UNFPA, l'UE, la Banque mondiale, le gouvernement fédéral du Nigéria et les philanthropes.

Mots-clés: Explosion démographique, sécurité sanitaire, prévision, Nigéria

#### Introduction

Population explosion is the rapid increase in human population. In absolute figure and percentage, Nigeria is on the verge of population explosion. While any population growth rate above 0% is considered to have exponential implications [1], Nigeria's growth rate of 2.6% in 2016 is of serious concern. With an estimated total population of 198 million as announced by the National Population Commission (NPC) [2], the increase if remains unchecked will reach explosion status in the future. Increase in population cannot be divorced from the pressure of the social environment involving both macro and micro factors. The macro factors that could explain population explosion are the current national population and health policy, religious beliefs, culture and tradition, poverty, age structure of the population, widespread vaccination against infectious and childhood diseases resulting in improved rate of child survival, heterogeneity of the Nigerian society, fast decrease in mortality resulting in increased life expectancy. The micro factors include the traditional urge to have descendants and biological urge to reproduce, preference for many children (especially male), economic concern and objection to birth control.

Health insecurity is a major consequence of population explosion especially in societies with a bottom-heavy population pyramid like Nigeria. Health safety/security occurs where individuals are protected from diseases and have access to quality healthcare services, whereas health insecurity exists when people are exposed to health risk factors inherent in uncontrolled population. A nation is health secured when available resources matches the population. This paper examines the current population situation in Nigeria and its implication for the future. The paper thus discusses the current state of the population, the social determinants of the population explosion, forecast for year 2050, and conducts a Strength, Weakness, Opportunity and Threat (SWOT) analysis of the present and future population (2050) of Nigeria.

# Situation analysis

According to the United Nations, Nigeria which is the most populous country in Africa is projected to grow to 239 Million people by 2025 and 440 million people by 2050 as a result of its population momentum, thus making it the fourth most populous country in the world [3]. The Country's Total Fertility Rate (TFR) is 5.3 according to the latest Nigeria Demographic and Health Survey [4]. Low use of contraceptives have been adduced to cause of high fertility rate in Nigeria [4], Studies have shown that one in ten

pregnancies in Nigeria were either mistimed or not wanted [4]. About 16% of married women who want to stop or postpone childbearing in Nigeria are currently not using any form of contraception [5]. Fertility rate varies by residence and region standing at 5.3 children on average compared with 4.5 children per woman in urban and 5.9 children per women in rural areas respectively. Fertility is highest in the North-west Zone with an average of 6.6 children and lowest in the Southwest with an average of 3.9 [4]. Fertility also varies with mother's education and economic status with secondary education and above standing at an average of 3.4 children and no education 6.7. Also, Fertility rises with an increase in wealth with poorest household having 6.7 children compared to wealthiest households having 3.8 [4].

Migration is a dynamic feature of population distribution [6]. The 2006 Population and Housing Census of Nigeria have been reported to show that the country have close to 1 million (999,273) foreign nationals in the country [6]. Cross-border migration contributes to population growth for the receiving country. The illegal influx of migrants from Nigeria's neighbouring countries such as Republic of Niger, Chad and Republic of Benin due to the porosity of the Nigerian borders tremendously contributed to the explosion of the population figures [6], [7]. Nigeria continues to experience high influx of internal and external migration as a result of its population, economic climate and porous borders. Attention has been given by the Nigerian Government on the migration issues with the establishment of National Commission for Refugees (NCFR) in 2009. The Agency oversees issues relating to migration and Internally Displaced Persons (IDPs). Generally, population explosion in Nigeria is better understood within the context of the social milieu.

# Social determinants of population explosion in Nigeria

In order to understanding human fertility behaviour it is important to probe into economic, social and cultural context sustaining people's attitudes and [8]. At the micro level, household decision making process about the preferred number of children can be held accountable for fertility behavior. This is influenced by factors such as education, income, occupation, and age at first marriage, religion and culture and so on. At the macro level, sociological analysis attests to such factors as culture and tradition, pro-natalism (patriarchy and traditional urge to have descendant), resource sharing, poverty, age structure of the population, slow fertility decline, ethnicity and

heterogeneity, religion, population and health policy [9]. These factors are discussed below.

#### Micro Factors

- a. Education: Researchers' have reported that education have effect on the fertility behaviour of persons' especially in the use of contraceptives [8]; [10]; [11] irrespective of the location being rural or urban setting. Education also increases the female autonomy towards sexual, reproductive health and fertility behaviour [12]. Women and men with no formal education have their first birth four years earlier than women with secondary education {18.1 and 22.4} and gave birth to twice the number of children compared with women who have at least 10 years of formal education [13].
- b. Occupational Status: Although women and men employed in jobs requiring minimum educational qualifications have lesser the number children than they are likely to have naturally [10], Most Nigeria women are either employed in the informal sector or not employed at all. As a result they not restricted by such occupational barriers.
- c. Age at First Marriage: Age at first marriage influences men and women fertility behaviour [14]; [13].
- d. Early marriage predisposes women and men to high fertility rate. The age at which women get married is a function of socio-economic factors including educational and economic background, jobs, official law of the land, and so on [15]. The practice of early marriage in Nigeria has not only led to an unprecedented population explosion but has equally given room to underdevelopment of the nation in the facets of bad governance [16].
- e. Sex Preference: Sex preference, influences high fertility rate [17]; [18]; [19]. Sex preference is rooted in culture and perceived role in social security [20]; [14]. Hence, the more couples desire to have children of a particular sex the more likely that they will end up in high fertility and contribute to population explosion.
- f. Type of Marriage: Type of marriage has implication for population explosion. Polygyny is more likely to produce more children than monogamy [14]. Because women bear the cost of childrearing in polygynous marriage men are likely to desire for more children [21]. There is also the case of surrogacy which is seen as an Assisted Reproductive Technology (ART). Here ART is considered through the traditional and culturally way of getting an additional but younger

- wife for the sole purpose of making babies into a family where the wife cannot bear children [22]. When this happens it will increase the population.
- g. Ideation: Ideation is said to influence people's intention and actual fertility behaviour. A recent study revealed that the high fertility desire and low contraceptive use among Nigerians are both determined by the different dimensions of contraceptive ideation [23]. The individual opinion influences fertility preference and this has implication for population explosion.

#### Macro Factors

- a. Culture and tradition: Culture is a major force in human population dynamics. Cultural innovations in agriculture and social organization such as tools and other technologies have been considered for a long time as key factors in human population growth [24]. Traditional beliefs like in Igbo culture where women who give birth up to ten children are celebrated and even conferred with the title "ehi ukwu" which is Igbo Leadership [25]. This cherished culture can equally result to population explosion.
- b. Patriarchy and traditional urge to have descendant: Nigerian men compared to women want more children and are less likely to approve family limitation and thus frown at family planning [26]. Tradition that support male gender preference for lineage continuity and other factors contributes to population explosion.
- c. Resource sharing: The population of a state is one of the criteria used in sharing resources of the nation. Hence, state with higher population gets higher resources. Consequently, people are likely to give birth to more children in order to have a high population representation of their states which then results to population explosion [27]. The resource sharing does stem from polygamous family, where women with the highest number of children does get more of the man resources [28]
- d. Slow decline in fertility rate: In Nigeria, the fertility rate is high at an average of 5.5 children per woman and about two-thirds of women aged 15–49 years had a live birth in the five years preceding the 2014 National Demographic and Health survey [4]. Though the fertility rate has declined, it is very slow when it is compared to the years in between the compared period (28years).
- e. Ethnicity and heterogeneity of the Nigerian society: Identifying ethnicity as a strong predictor of

# SWOT Analysis of the Present and Future Population (2050) of Nigeria

#### Strengths

- The forecast of population increase serves as huge reservoir for labour force. Huge number of working age population, if well utilised, is a strength to the development of a nation
- The reduced infant mortality rate and U5 malnutrition enhances the health status of the future
- Decline in fertility rate translates to increased maternal and child health.
- You may consider its advantage in population strength of the military

#### Weaknesses

- Population increase is a bane of a nation's development if policies and programmes are not tailored towards meeting the needs of the teeming population.
- The non-recognition of the diversity of the Nigerian state leads to the failure of the Nigerian population policy of Nigeria to reduce nation's population.
- Problems of poor implementation of health policies and reforms experienced in parts of Nigeria are compounded by heightened level of insecurity as population increases.
- An increasing population will increase dependency ratio and workers will have more mouths to feed thus creating social burden and economic liability on the working population. Having a youth bulge with poor investment on them is likely to have consequences for security of the country.

#### Opportunities

- Increased literacy rate creates opportunities that both local and international organisations can tap into.
- Reduced fertility rates create opportunities for women to positively navigate their lives and to reach their potentials
- Reduced fertility rate is an opportunity for children had to be given adequate care and tutelage.
- Growing population will create a large market for goods and services which will thus create market for investors.

#### Threat

- Increase in the burden of non-communicable disease due to smoking and diabetes
- Increased expectancy rate prevents the younger people from entering the labour force especially in developing countries like Nigeria
- Increasing population is a threat to resource sharing thus increasing the tendency of violence related to resource allocation/sharing. More so Huge population with poor economic policies, will make the country a target and 'dumping ground' for products from developed countries. Thereby limiting the chances of national economic growth and development

reproductive behaviour and fertility outcomes has continually been documented in some parts of Nigeria [27,20]. In the regions where this occurs,

fertility behaviour seems to be driven by religious values and cultural beliefs [29].

f. Religion: Religion has a strong influence on the fertility behaviour of individuals. In regions where religious sentiments hold sway on practitioners' attitude to low fertility may be viewed as contradictory to the will of God. For instance, the god of fertility in Africa culture is associated with human reproduction. Similarly, Islamic and Christianity regard human reproduction as God's blessing that nobody should hinder. These religious frown at family planning even though some Churches tend to accept it. To a large extent what Christian doctrine supports is natural family

planning and not the use of artificial barriers. Because of this many women have had unwanted children at old age when the natural family planning fails. [29].

g. Population and Health Policies: The 1998 Nigeria population policy which was revised in 2004 was formulated to address the population issues and challenges in Nigeria [30] including population explosion. The policy of four children per woman aims to reduce fertility and keep the country's population under control. However, this objective has not been achieved due to political, religious and other socio-cultural factors [31,32].

# Forecast By 2050

In 2050, the population of Nigeria will increase from 195.4million to 440 million. This is a huge increase with prospects of either positive (strengths) or negative (weakness) consequences for the nation's

growth and development. At 2050, the life expectancy will also increase from 53.76 to 69.3. This can be linked to the assumption of an increase in the quality of modern health services, welfare services and activities of development partners. Furthermore, there will be decrease in the fertility rate by 2050 as the rate will be 2.1 as against the 5.4 figure in 2018. This means that the average number of children for a woman will reduce from 5 to 2 children.

# Nigeria short, medium and long term plan to 2050

#### **Short Term Goals**

The existing population and health policies in the country should be reviewed. This will aid in identifying the bottlenecks as well as identifying resources for effective intervention. Stakeholder's engagement meeting should also be conducted in order to mobilise support for the intervention strategies to be put in place.

# Medium Term Goals

Medium term plan includes development of programme of action, curriculum development and capacity building.

# Long Term Goals

Long term plan should target policy formulation and legislation. This should be detailed and efficient policies that will help enhance the health status of the citizenry.

# Sources of Funding

Funding for the activities can be sourced from development agencies namely United Nations Development Program (UNDP), United Nations Children Fund (UNICEF), United Nations Population Fund (UNFPA), European Union (EU), World Bank, Federal Government of Nigeria and Philanthropists.

#### Conclusion

The total fertility rate for Nigeria has declined when compared to past decades. However, reports have shown that the fertility rate is still high and that the country's population is at the verge of exploding. The United Nations projection of the country's population to increase from 170 million to 440 million in 2050 calls for drastic policies and programmes. If no concerted efforts put in place, the country may experience serious health challenges and threaten development and survival agenda.

It is therefore important to put in place health and sex education, and the importance of contraceptive use for prevention of unwanted pregnancy and complications during child birth as well as prevention of sexually transmitted infections. Awareness programme about the importance of family planning, and the consequences of population explosion on individuals, households and the nation should be put in place. Also, sex education should be mainstreamed into primary and secondary school curricula to mitigate the effect of sex information from peers and unproven internet sources. The culture of virginity should be re-emphasized to prevent pre-marital sex by emphasizing health and social benefits inherent in it.

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