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Handbook of Research on Sustainable Development and Governance Strategies for Economic Growth in Africa

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Chapter 25

An Overview of Population Growth and Sustainable Development in Sub-Saharan Africa

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ABSTRACT

Development efforts in several countries in Sub-Saharan Africa (SSA) are harmed by a combination of many factors, high rates of population growth being among of them. Despite the strong links between population and sustainable development, these issues were not a priority in broader development policies and strategies in SSA. Population and sustainable development had been often addressed separately at policy and programme levels. Despite the fact that decision makers in these countries recognize the importance of population issues for sustainable development, these issues are rarely worked on together, limiting the payoff that could result from integrating the two. This chapter, therefore, re-examines and relates these two concepts to see their compatibility and provides a more realistic approach in converting population growth into economic gains for future development of SSA countries and Africa in general.

INTRODUCTION

Population growth is one of the key factors to consider when thinking about sustainable development. The strong population growth is mainly caused by the high birth rate and the resulting increase in the number of young people. At the same time, improved in medical care and decline in mortality rate can result into more children grow up (Mutunga *et.al.*, 2012). These conditions still exist in many African countries. Studies indicate that the fastest growing population is in Sub-Saharan Africa despite the large mortality rate caused by AIDS (United Nations, 2011). Here, the high population growth can be connected

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to all of the negative structure characteristics of under development. Since the population in Africa and SSA countries in particular grows the fastest, there is hardly a development policy discussion that does not begin with a population problem and ends with the apocalyptic horror and catastrophe scenarios that involve a population explosion. This creates fear because many see this to be the main cause of the feared global match from the poor regions to the prosperous regions of the world.

Population situation in many African countries contribute to or detract from their chances of realizing the goals of development, not only for the current generation but also for the future generations (Herrmann, 2012). The link between population growth and sustainable development is particularly critical for Africa. Statistically, it shows that world population has increased by 2 billion people over the past 25 years, from 5.3 billion in 1990 to 7.3 billion in 2015. Although population growth rates have slowed, the world's population is still growing by an additional 81 million people per year. With the exception of Europe, where total population is projected to decrease by slightly less than 1 percent by 2030, all other regions are projected to grow by at least 10 percent over the next 15 years. Africa, long the poorest and least developed continent, will account for more than 40 percent of the absolute increase in population so that, by 2030, the region will account for nearly one fifth of the world's total population (United Nations, 2015). Sub-Saharan Africa alone has around 900 million people and it is projected that by 2025 and 2050 this number will grow to 1.2 and 2 billion respectively. With an average population growth rate of more than 2 percent for most countries, the region has the fastest growing population in the world. Of the 2.4 billion people who are projected to be added to the world by 2050, 46 percent will be born in Sub-Saharan Africa. The region will contribute 77 percent of the total increase in global population by 2100 (Unies, 2017).

Population growth in Sub-Saharan Africa is manifested from two dimensions; micro and macro levels (Garenne, 2016). At micro level of individuals and families, high rates of population growth are associated with high dependency ratios and low investment in the human capital of children and young adults. At macro level, high rates of population growth hinder investment in both human and physical capital formation, and exert pressure on the environment and often fragile resource base (Basten *et al.*, 2011). Despite the strong links between population and sustainable development, these issues are not a priority in broader development policies and strategies rather are rarely worked on together in most of SSA countries (Ohadike, 1996). This is to say that population and development are often addressed separately at policy and programme levels.

Despite that SSA is relatively rich in natural resources, still development strategies and programmes pursued have not always been in harmony with the objective of ensuring decent living standard for population. For instance, rapid population growth as one of the key factors has seriously damaged the quality of SSA's environment and the life of its population (Sherbinin *et al.*, 2007). In absolute terms, about two-thirds of SSA's agricultural lands are already seriously degraded. At the same time, in view of social realm, there is a big gap between economic and social well being (Jayne *et al.*, 2003). The question is what can be done by SSA to convert population growth into economic gains? Specifically, to what extent does rapid population growth make it more difficult to provide essential social services for people? What are the implications of higher population growth to the development efforts of SSA? To what extent poor living limit the freedom of people on reproductive health decision making? What strategies need to be adapted to ensure a balance between population and development? To answer these questions, government, donors and civil society need to invest more in population and development, to address the two issues together in policies and programmes, and to build the technical capacity to develop programmes and research.

In view of the above situation, there is therefore an urgent need to critically re-examine and highlight the gap that exist between population growth and sustainable development and revisit population and development strategies that have been pursued in SSA and to adopt approaches that have a real potential to put SSA on the road to sustainable development taking into consideration population issues.

In overall, this chapter is expected to contribute in understanding the role of population in sustainable development by analyzing population and sustainable development links in SSA. The evidence in this paper should guide SSA governments in setting priorities and making investments that integrate population and sustainable development plans. It is also aimed at helping policymakers, donors, and civil society understand the importance of incorporating population, issues in policies and programmes to address sustainable development in SSA and Africa in general.

This chapter is based primarily on a theoretical and historical literature study. In an attempt to create as wide theoretical basis for this study as possible, various published literature were consulted. In this study, a selected number of country cases was employed. Selection of countries based on adoption of population policy and political stability.

BACKGROUND

Theoretical Review of Population and Development

Population growth can be described as an increase in the number of people that reside in a country, state, county, or city (Beaie and Acol, 2009). On global aspect, population had been rising due to significant increase in fertility and decreases in mortality rates accompanied by the level of development. Various literatures indicate that most population growth takes place in lowly developed countries. These countries are growing two or even three times as fast as the highly developed countries (Mutunga *et al.*, 2012; United Nations, 2011; Speidel *et al.*, 2009; Taylor, 2002). The major reasons cited being the developed countries receive more of the benefits of modern medicine and the worldwide awareness of proper nutrition and thus this has combined to cause a decrease in the death. At the same time, low developed countries have demonstrated a tremendous growth in population because of high fertility rate (Speidel *et al.*, 2009). The reason had been stated to be the long established customs of placing a high value on children and moral value as most men and women preferred to have as many children as they can (Mutunga *et al.*, 2012).

On the other hand, development is often assumedly socio-economic, political, science and technology biased. Arguably, the concept of development is a complex one (Oyeshola, 2007). Its difficulty is not only in terms of definition but also in terms of measurement (*ibid*). Usually development is measured either by Gross National Product per capital (GNP), by the GDP, or the Physical Quality of Life Index (PQLI). However, none of these seem to be perfect measure of development unless otherwise they are combined. Development focuses on human needs, the compilation of poverty profiles and that developmental efforts are to be placed on measuring the costs of adjustment not only in terms of lost output, but also in terms of lost lives and the lost human potential (Porter and Faust, 2009). The truth is that people are both the means and the end of economic development (Oyeshola, 2007). Therefore, development cannot be merely economic development or GNP as important as that may be. It must necessarily include the conditions of reality that allow people to take their destiny into their own hands. Taking their lives into their own hands will involve economic, social, political, psychological, environmental, cultural, religious

and international dimensions of their environment. In this wise, development includes the conditions of reality that allow people to take their destiny into their own hands individually and collectively (Oyeshola, 2007). Better still, development can be defined in terms of the ability and capability of a people.

Contemporary, the concept of development has taken on a new mask; it is qualified as sustainable development. Indicators, such as GDP, and human development indices, such as life expectancy, access to health, clean water and education, are used to measure human development (Costanza *et al.*, 2007). What, then, is sustainable development? It has been defined differently and can be defined in terms of indicators, or what it specifically seeks to measure. While some have defined sustainability in relation to the ability of man to preserve the available natural resources and not overuse the resources in a way that it will be deficient in the future; others have defined it in relation to policy making (Oyeshola, 2007). But the definition given by the UN Commission on Economic Development in its 1987 Brundtland report seems to be generally acceptable. In its report titled *Our Common Future*, sustainability is defined as that which “meets the needs of the present without compromising the ability of the future generations to meet their own goals” (United Nations, 1987). Although, some writers have found this definition to be problematic (Taylor 2002; Jabareen, 2008), yet, most believe that it meets most aspects of sustainability in its wide applications (Dale, 2001).

There exists an extensive literature spanning many realms of social science that explain aspects of population growth and development. For example, there has been a long-standing debate among three schools of thought that emanating on population growth (Lekganye, 2004; Rogers *et al.*, 2012). One school of thought sees population growth as a crisis for mankind, for human subsistence and for living space. To them high population growth is likely to increase pressure on food, space and other resources as well as social and community relationships with regard to the distribution of income. As a results, high population growth lead to an increase in economic hardship, malnutrition and consequently death rate. Another school of thought views that population growth enhances the prospects for economic development simply because, first economies of scale or a greater output per unit of input are made possible by larger markets and by a larger and more specialized labour force and second the pressure of increased family size or community size cause people to work harder as well as motivate both individual and communities to develop or adopt innovations or improved methods and processes of production. The third school of thought postulates that population growth is key to many of the recent historical patterns, such as industrialization, urbanization as well as technological and social innovation. To them population growth in developing countries is perceived as both a challenge and an opportunity to exploit and extend their resources.

To extend these schools of thought, the two theories were employed, Malthusians and the Boserupians theories of population growth. The Malthusians (Ehrlich, *et al.*, 1993) conjecture that unchecked population growth will ultimately lead to a complete collapse of the natural environment that will halt population growth or even wipe out the human population. Malthusians views took stand on three propositions. Firstly, the population cannot increase without the means of subsistence, secondly, that population invariably increases when the means of subsistence are available, and thirdly, that the superior power of the population cannot be checked without producing misery and vice. In contrast the Boserupians (Boserup, 1965) argue that population growth and the resulting natural resource scarcity will spur technological and environmental innovation that conserves natural resources and increases the material services that the resources deliver, which can continue to sustain the population. Whichever school of thought one ascribes to, there appear to be a general agreement that population growth and the natural environment both affect one another (Dasgupta, 2000). However the empirical literature is relatively small and so

far the primarily focus has been on the effect of population growth on environmental degradation with only a few recent studies analyzing the other direction of the relationship, the effect of environment on population growth. However, none of these studies have accounted for the potential endogeneity in the population-environment relationship implied by the 'Malthusian' or 'Boserupian' hypotheses.

Inter-Relationship Between Population and Sustainable Development

The relationship between population and sustainability is context-specific and mediated by a host of other factors, economic, political, social and cultural (Ericksen, 2008). Population is a crucial aspect of sustainable development across its three dimensions. Population growth and decline, urban/rural location, migration, composition in terms of sex and age and a host of other factors all have an impact on economic growth and labour markets, health, the environment and the prospects for present and future generations (Birdsall and Sinding, 2001). The realization of sustainable development and the need to maintain a balance with population growth has become the pressing goal that is facing the communities, enterprise organizations, government and the world at large. The hesitancy to address population growth does not come from a scientific consensus that population growth is detrimental to sustainable development, indeed scientific studies continue to stress the variable's importance but rather from the perceived cultural, ethical and political infeasibility of raising the topic (Mason, 2003). One of the most important concerns of this era is the question of population growth and sustainability by looking at the sustainability indicators. This has reignited an extensive debate worldwide on the relationship between population growth and sustainable development. However, the relationship between population growth and economic development is very complex, and the net effect of population factors on sustained development is sometime ambiguous.

Some proponents view that population growth can increase overexploitation of open access environmental resources (Brander and Taylor, 1998) or it may increase the demand for environmental resources, such as timber or non-timber forest products, natural beauty as an amenity or for recreational purpose, thus raising the prices of environmental goods and potentially providing the incentive to maintain the stock of natural resource supplies for reaping the flow of the resource rent (Foster and Rosenzweig, 2003). In the other direction, environmental deterioration may increase the demand for children to fetch water and fuel wood or manage livestock (Dasgupta, 2000) or, by worsening individual and public health (and thus raising child and adult mortality), to provide economic support to the household (Sah, 1991; Wolpin, 1997). Fusing these forces is a "vicious cycle" theory (modern Malthusianism) that conjectures a reinforcing downward spiral wherein population growth depletes the environment, spurring yet more population growth, and so on. With this aspect, it is in indeed population growth is strongly and inseparably linked to sustainable development. A reduction in the population growth is believed to improve country's prospects for economic development, which in turn, is believed to enhance a country's ability to improve the lives of its citizens (Herrmann, 2012). This is based on the reasoning that a reduction in fertility reduces the size and proportion in the young age group and, therefore, reduces the demand made by education and health services for government resources.

Other proponents view that poverty in less developed countries is not caused by population growth or pressure rather it is because of subsistence economies such as nomadic style of life, shifting cultivation, and inadequate communications and shortage facilities (Sinding, 2009). When compared to the developed countries, the evidence shows that population in these countries had more than quadrupled since the middle of the 18th C. However, real income per head is estimated to have increased fivefold

at least (Malmberg, 2005). Same experience has been reported from China and India which shows that while the average income in China and India remains low, their impressive economic growth and enormous populations have made them two world powers of extraordinary importance, whose economies are surpassed only by that of the United States (Jacques, 2010). This is to say that a large population means a more consumers as well as more producers and therefore large population is an opportunity for economic growth of the countries. Kelly and McGreevey (1994) also noted that there is no inevitable Malthusian barrier to economic progress, as some high-fertility countries such as China and India have been experiencing high rates of per capita income growth. Nevertheless, the African crisis is very much a function of the structure of the African economy and its demographic configuration. Economically, there is the dominance of subsistence production and a dependence on undeveloped and unscientific methods leading to low productivity.

The factors behind Africa economic decline are much debated. Some see mainly external causes, others internal. Changes in per capita income have three main sources (Goldin *et al.*, 2015); variations in the terms of trade, growth in population and growth in production (GDP). Although many African countries have seen their development efforts disrupted by sharp falls in the world price of commodities, viewed over the long term, falling per capita incomes for Africa as a whole are explained largely by declining level and efficiency of investment, compounded by accelerating population growth and not primarily by external factors (Goldin *et al.*, 2015).

According to Mc Kinsey Global Institute (2010), the demographic bonus in SSA had never been transformed into a demographic dividend, i.e. into a gain for the national economy, unlike the experience of the Asian Tigers and other countries like China and India. At the beginning of their impressive development, these countries had a demographic starting point similar to that of many SSA today and their level of development at that time was just as bad. The development boost of the Asian Tigers was made possible by two fundamental changes: A demographic bonus was created because the number of people of working age increased in relation to the number of dependant young and old people and economic performance grew and was accompanied by increased buying power and the emergence of a middle class (Speidel *et al.*, 2009). The important question is when SSA will catch up with some Asian Countries like China where the demographic transition has advanced significantly? It is apparent that SSA failed to transform their populations into a demographic dividend. This is to say that it is not just the investments that determine the future development of the individual countries, but also the structure of the population, most importantly, the number of old and young people living in a country, as well as the population's health status and level of education (Speidel *et al.*, 2009).

It is remarkable that, despite many new developments over the past 50 years, one fact looks very much the same: populations in SSA are growing most rapidly where such growth cannot be matched with sustainability and thus create additional stresses on the ability of governments to meet the basic food, clothing, and shelter needs of their populations.

COUNTRY EXPERIENCE OF POPULATION AND DEVELOPMENT

Empirical Review of Population and Sustainable Development

The demographic dividend has been touted as a potential source of growth for the SSA and its relatively young population (Oosthuizen, 2014). In the same vein, it comes with the challenge of employment

creation that can absorb the large cohort of youth that is set to enter sub-Saharan Africa's labor markets in the approaching decades. Less positively, however, countries that fail to plan accordingly might miss these potential opportunities or the resulting youth bulge could increase the risk of social tension and other risks arising from high youth unemployment rates.

Relative to other regions, sub-Saharan Africa's demographic transition begins from a much lower base and is beset by conflict and death from HIV/AIDS and other diseases resulting in a demographic transition peak that is expected to be much lower than that of other regions (Bloom *et al.*, 2003). More recently, studies indicate that the rapid increase in population in low developing countries has been because of marked fall in the death rate, without a corresponding fall in the birth rate. Globally, between 1950 and 2010, the fertility rate has almost halved and is estimated at 2.5 births per woman (Lam and Leibbrandt, 2013). However, sub-Saharan Africa's fertility rate has declined at a much lower rate and remains relatively high at 5 births (World Bank, 2014). Data from Ethiopia and Nigeria, the continent's most populous nations, indicate that average fertility rates have been declining over time to current rates of 4.6 and 5.7 respectively (Bhorat and Tarp, 2016). While these rates are still relatively high, the declining trend indicates that these countries are still very much in a demographic transition phase. However, different African countries are at different stages of the demographic transition: South Africa's birth rate has already declined to 2.4 and is much further along its transition compared to Mozambique's 5.9 births per woman, a rate that is observed to be rising with time (Bhorat and Tarp, 2016). The fall in the death has been associated with the lengthening of the life of adults and a fall in infant mortality (Copeland and Taylor, 2004). To be more specific, the rapid increase in population are seen predominantly as a consequence of the fall in infant mortality and to a lesser extent a greater life expectancy once the first critical year has been survived (Speidel *et al.*, 2009).

Subsequently, unlike other regions with aging populations, sub-Saharan Africa faces a rise in the share of its working-age population. Population data indicates that the working-age population will increase by 70 percent from 466 million in 2013 to 793 million in 2030 (Lam and Leibbrandt, 2013). However, high levels of youth unemployment and/or underemployment coupled with low-wage income will significantly constrain the continent's ability to reap the benefits of the demographic dividend. Youth unemployment across sub-Saharan Africa is four times higher than the region's aggregate unemployment level. In Nigeria, 45 percent of the youth are unemployed and in Ghana the rate is twice as high as the national rate. Youth wages in South Africa are observed to be 40 percent less than the calculated peak labor income (Bhorat and Tarp, 2016).

Population density in SSA has increased over the last 25 years at a rate almost double any other region of the world. While some countries, namely Mauritius, Rwanda, Burundi, and Comoros, are among the most densely populated globally, even countries in Africa that are less densely populated have seen their densities double since 1990 (Seto, 2011). For example, Niger, which now boasts a low population density of 16 people per square kilometer, experienced an increase of its population density by 150 percent. Burkina Faso, which has had an increase of over 100 percent, maintains a population density of 66 people per square kilometer. These changes in population density come also as African countries are transitioning to become more urban, with larger proportions of people living in cities than rural areas than ever before. In smaller countries, like Rwanda, which a population density of over 440 people per square kilometer, this trend means that many cities do not have the room to grow outwardly (World Bank, 2015; Seto, 2011).

The Sub-Saharan region is blessed with enormous cultural, mineral and natural resources. Despite this richness, the region has faced problems due to its inability to embark on a meaningful path to a level

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of well being deemed satisfactory for a sizable proportion of its population (Taylor, 2002). Out of the 7 billion people that currently inhabit the world, more than 1 billion continue to live in extreme poverty of which majority are SSA. About as many suffer from food insecurity (FAO, 2008) and live in slums (United Nations Habitat, 2010; UNFPA, 2007), and millions are unable to find productive and remunerative employment (ILO, 2012). It is argued that there has been tremendous increase in the population of developing countries, which has superseded economic growth. According to the United Nations (2015), between 1980 and 2010, the population of Sub-Saharan Africa has grown from 383 to 689 million people, which is an increase of 80 percent. In contrast, in much of Africa, very little economic growth has occurred over the past fifty years. However, instead of the desperately needed economic growth, Sub-Saharan Africa as a region has seen a decline in per capita GDP from \$575 in 1980 to \$524 in 2010 (World Bank, 2015). Some countries are even poorer today than they were thirty years ago. Sub-Sahara Africa has had the lowest Gross Domestic Product (GDP) for decades (Marke, 2007).

With the exception of South Asia, the gross national product (GNP) per capita of US\$524 is the lowest, amounting to 18 per cent of that of Latin America and the Caribbean and a mere 2.6 per cent of that of the industrialized countries (Table 1). Further, Africa, South of the Sahara, ranks the lowest of all regions in terms of the percentage of primary school enrolment, adult literacy, and population with access to water and health service.

In order to avert hunger and provide its growing population with productive jobs and rising incomes, SSA's economies need to grow by at least 4 to 8%. The primary source of this growth can only be agricultural production. SSA could then not only meet its own food requirements, but also generate the foreign exchange needed for development (Ajakaiye *et al.* (2016). However, Bloom *et al.* (2003) noted that observing a demographic transition does not guarantee that the continent will benefit from a demographic dividend unless the shift is accompanied by nuanced policy changes that enhance the productivity of the working-age population and support the broad based expansion of the economy and employment opportunities.

Population growth continues and will continue to influence development challenges in Africa and Sub-Saharan Africa in particular. Indeed, most sub-Saharan development policies note that the region's rapid population growth inhibits efforts to alleviate poverty, ensure food security, preserve the environment, and improve Africans' well-being (United Nations, 2015). Failure by government in these countries to address population matters in their efforts to promote sustainable development continues threatening

Table 1. Relative socio-economic indicators of SSA

Socio-Economic Indicators	Africa South of the Saharan	Middle East and North Africa	East Asia and Pacific	Latin America and Caribbean	Industrialized
GDP (US\$)	524	1,977	800	2,648	19,521
Primary School enrolment (%)	67	96	-	-	-
Adult literacy rate (%)	50	57	80	85	96
Population with access to:					
(a) Water (%)	42	77	66	80	-
(b) Health services (%)	56	82	87	74	-

Source: World Bank World Development Indicators 2015

food and energy security, jeopardize economic growth, social progress and social security, and negatively affect health and life expectancy.

As the number of people to be provided for grows, resources tend to reduce in relative terms thus making planning and implementation of development programmes difficult. Since population increase trails behind food production and economic growth in SSA, there is severe population pressure on the environment as people try to scratch a living from the soil (Begossi, 1998). This implies that food supplies and agricultural production must be greatly increased to meet the needs of a rapidly growing population. This in other hand limits the allocation of resources to other economic and social sectors leading to failure to reduce poverty. Likewise, the rapid increase in population will automatically increase dependency ratio in the country. This dependency further worsens the economic situation and the population increase threatens the depleting natural resources in the region. This in return will force the country concerned to allocate more resources to people who consume but not produce goods and services (Herrmann, 2012). Scholars therefore argue that high population growth has made things difficult in developing countries, as people have to scramble for available resources, which results to conflicts (Ikejiaku, 2009).

Case Study of Representative Countries

Governments in Sub-Saharan Africa are under pressure to ensure population growth matches all aspects of development. While progress has been made towards achieving the MDG targets, differences persist across individual countries. Countries which recorded success over the last two decades have been able to find effective ways for reducing problems associated with rapid increase in population.

Apparently, policies have been implemented to standardize the relationship between population and development in order to attain improved living conditions. The concern has been that the development has been in some way uneven and perhaps of limited effect. By 1974 only three sub-Saharan countries (Ghana in 1969, Kenya in 1967, and Mauritius in 1958) had adopted an explicit population policy. Few years later the number, despite the claim of growing awareness of the importance of population factors in development planning, rose only to six. However, in 1988 several countries were assessed to be drafting national population policies for adoption (Kwankye and Cofie, 2015; Mosley and Branic 1989). Some of these policies have been challenged as detrimental to economic growth while others argued for more stringent population policies.

Yet, the critical question is why there has been slow progress in spite of the efforts made, even if limited, and indeed in spite of many countries in SSA participation in many world population conferences and other politically focused meetings. There have been indications that African governments are increasingly recognizing that population growth has implications for national development (Kwankye and Cofie, 2015). However, in African development plans the methods adopted varied a great deal from the very rudimentary to the most complex. Some countries have barely described their demographic profile and trends, others have more seriously undertaken some macro and sector analysis, while a few have focused on demonstrating the relationship between population and selected socio-economic factors such as income distribution, education, savings, food and nutrition. Because of these problems, African countries have been implementing policy measures which are implicit and indirect rather than explicit and direct. These measures sometimes obliquely influence population variables while explicit and direct measures have a direct bearing through well defined goals and strategies (Johnson, *et al.*, 2011; Ohadike 1996).

For instance studies suggest that in many countries South of Sahara, family planning policies designed to regulate population increase and economic growth have been given greater attention than non-family planning aspects of policy. This may be justified because the contribution of high fertility to population growth is the most critical factor affecting the pace of development (Chadwick, 2016). Besides, and specifically in terms of the demographic transition, fertility, by its very nature and resilience and for cultural reasons, has been more resistant than mortality to change and innovation. Births are normally welcome events but deaths though inevitable are occasions for sorrow. This also has to be assessed against the apparent contradiction that 27 SSA countries provide support for family planning services mainly for the combined reasons of promoting maternal and child health (MCH) and family health and reducing the levels of fertility and population growth, while some 15 other countries support family planning services for health reasons alone. The overall volume of more and more governments in Africa is beginning to perceive their fertility and population growth rates as too high (Ohadike 1996). But the successful practice of family planning is a different matter.

Critically, focusing on overpopulation as a root cause of these problems often leads to problematic policy responses. Considering every country's need to strive towards decrease population growth rate while sustaining the development, there is the growing concern to adopt policies that give the right balance on both. Population policies that are coercive in their approach to reducing fertility rates compromise human well-being, dignity, individual bodily integrity and autonomy and are inconsistent with international norms and standards (Mason, 2003). A selected number of country cases are presented hereunder.

Kenya

The trend in population growth in Kenya has been fluctuating over the years. The figure shows that the country recorded the highest population growth in 1967 at 4.7%. In 1979 the growth rate increased to 3.8% from a growth rate of 3.3% in 1969. The population growth rate decreased between the years 1979 and 1989 recording a growth rate of 3.4%. For the period between 1989 and 1999 growth rate was 2.9% which again increased to 3.0% for the period 1999 to 2009 (Republic of Kenya, 2010).

Kenya was the first Sub-Saharan African country to have a population policy by forming of the National Family Planning Programme to reduce population growth in 1967. However the implementation of the population policy did not yield the desired results and led to the revision of the 1967 policy in order to incorporate demographic and socio-economic goals and diversified implementing ministries and non-governmental and religious organizations. The changes focused on reduction of the population growth rate, reduction of fertility, Reduction of mortality particularly infant and child mortality and also the reduction of rural–urban and rural–rural migration (Republic of Kenya, 2010).

In 2000, the government of Kenya launched the National Population Policy for Sustainable Development. The policy also addressed the issues of environment, gender, and poverty, as well as the problems facing certain segments of the Kenyan population, such as its youth. Among the salient features of these policy included improvement of the standard of living and quality of life, improvement of the health and welfare of the people through provision of information and education on how to prevent illness and premature deaths among risk groups, especially among mothers and children, sustenance of the ongoing demographic transition to further reduce fertility and mortality, especially infant and child mortality, continuing motivation and encouragement of Kenyans to adhere to responsible parenthood and sustainability of the population programme among others (Gideon, *et al.*, 2013).

Population growth in Kenya continues to exert pressure on land and other resources. High fertility, combined with declining child mortality, gave Kenya one of the world's fastest population growth rates in the 1970s and 1980s (Ajayi and Kovole, 1998).

Tanzania

The total population of the United Republic of Tanzania according to the 2012 Census (United Republic of Tanzania, 2013) is 44,929,002, compared to 34,443,603 in 2002. This means that the population of Tanzania has grown by 10,485,399 persons or 30.4% since 2002. This translates into a rate of growth of 2.7 percent per annum for Tanzania during the intercensal period 2002-2012, compared to 2.9 percent per annum in the previous period (1988-2002). Several countries in Sub-Saharan Africa share similar (high) rates of growth, at varied population sizes (UNFPA, 2007). The corresponding population increases since 2002 for Tanzania Mainland and Zanzibar are 10,163,585 (30.4%) and 321,814 (32.8%) respectively. These represent a growth rate of 2.7 percent and 2.8 percent per annum for the 2002-2012 intercensal periods for Tanzania Mainland and Zanzibar, down from 2.9% and 3.0percent per annum respectively during the previous period. The enumerated population in 2012 is about 3 fold that of 1967. The current average annual growth rate of 2.7 percent per annum translates to about slightly over 1.2 million people per year (United Republic of Tanzania, 2013).

The relatively high growth rate of population of Tanzania is likely to impede economic transformation. This is because resources are likely to be spent on the growing large children population. Secondly, the changing age structure has economic growth potential due to the continued decline in age dependency ratios as well as the potential from gaining from demographic dividend. However, these potential gains are policy dependent. The economic gains from the changing age structure can be realized only if employment opportunities expand as rapidly as the numbers seeking new jobs. Agwanda and Amani, (2014) argue that, two major factors will determine Africa's future economic growth prospects: growth in the working-age share of the population and institutional quality. The institutional quality implies factors such as; strong rule of law, efficient bureaucracies, government stability, lack of corruption, and a stable business environment that encourages domestic and foreign investors. However, the final long term question needs some foresight. As the country seeks to harness the bonus from the youth bulge, it is time to consider the flip side the elderly population.

Malawi

Malawi's population has grown rapidly from almost 4 million in 1966 to 14.8 million in 2012 (National Statistical Office, 2010). United Nation population projections show that Malawi's population could easily reach 23 million in 2025 and 37 million in 2050 if families continue to have, on average, six children. This astounding growth has come from a decline in mortality that the country has experienced since the 1950s due to improvements in nutrition and health care and stubbornly high levels of fertility that have remained unchanged since 2004.

Even with a national HIV prevalence of 11 percent, AIDS-related mortality does not offset the results of high fertility (National Statistical Office, 2010). As Malawi and the world improve health and reduce mortality by focusing on the Millennium Development Goals, Malawi's population growth will continue to pose challenges for its development, unless families have fewer children. Malawi has made substantial improvements in addressing its population issues, especially by increasing its use of modern

contraceptive methods, currently at 42% (Government of Malawi, 2011). Yet for Malawi to achieve its full set of goals in its Growth and Development Strategy (MGDs), it must address population growth.

Ghana

Ghana's population is growing rapidly at a rate of 1.9 percent, the population was 23.9 million in 2008 (CIA, 2010). The young age of the population 39 percent of the population is less than 15 years of age, and only 4 percent is age 65 or older is a result of the high rate of population growth.

Ghana adopted an explicit and comprehensive population policy in 1969. Although the 1969 policy was retained by successive governments, very little progress was made during the next two decades in reducing the rate of population growth because political commitment was absent. In 1994 Ghana's population policy was revised to recognize the fact that the socioeconomic conditions of the time differed from those prevailing in 1969 when the original policy was drafted. The new policy seeks to ensure that Ghana will achieve and maintain a level of population growth that is consistent with national development (Kwankye and Cofie, 2015).

The economy of Ghana is mixed, consisting of a large, traditional agricultural sector made up primarily of small-scale farmers; a small, capital-intensive modern sector involving mining and a few manufacturing establishments; and a growing informal sector of small businessmen, artisans, and technicians. The agricultural sector absorbs three-fifths of the country's labour force and accounts for about one-third (34 percent) of the gross domestic product (GDP) (Owusu-Agyei *et al.*, 2012; GSS, 2008). It employs about 50 percent of the population (GSS, 2002). The service sector, with a growth rate of 10 percent, is the fastest growing sector of the economy, and it contributes one-third of the country's GDP. The industrial sector contributes a little over one-quarter (26 percent) to the country's GDP. The leading exports are gold, timber, and cocoa.

One of the most important indicators of economic and social development in a country is the educational level of its population. There have been substantial improvements in educational levels since the country's independence, as more children take advantage of the opportunities to attend school. In 1993, 74% of men and 62% of women age 6 and older had attended school at some time. By 1998, the proportions were 79% for men and 65% for women. By 2008, the proportion of men who attended school had again increased to almost the same level as in 1998 (78%). The proportion of women attending school had also climbed to the highest level ever reported of 69% (GSS, 2008). However, like other SSA countries, no much progress has been made on the aspect of balancing population growth and sustainable development.

Burkina Faso

In 2010, the estimated population of Burkina Faso was 16.8 million people (CIA, 2010). Burkina Faso has a high birth rate and a high population growth rate (3.1 percent); at this rate the population will double every 23 years. Between 1990 and 2010, Burkina Faso's population increased by 57 percent, with the largest increases in population occurring in Centre-Nord. Given that Burkina Faso is a landlocked, densely populated country, this rapid population expansion will place increasing stress on limited natural resources.

On aspect of socio-economic development (World Bank, 2015), statistics also show that the poverty rate fell slightly between 2009 and 2014, from 46% to 40.1%. Real GDP grew at 5.4%, well above the rate in 2014 and 2015 (4%), but below the average of 6% posted during the 2003-2013 period. The maternal mortality rate fell from 484 deaths per 100,000 live births in 1998 to 330 deaths per 100,000 live births in 2015. Life expectancy at birth was estimated at 58.6 years in 2014. The gross preschool enrollment rate increased from 2% in 2005 to 4% in 2014, while the primary enrollment rate rose from 57% to 86.9% in 2014. Access to secondary education also improved, increasing from 20% in 2005 to 44.9% in lower secondary schools in 2014-2015 and from 5.6 percent to 14% in upper secondary schools. However, the youth literacy rate, which stood at 28.7% in 2010, is lower than the average rate of 71% for Sub-Saharan Africa. Like other countries South of Sahara, Burkina Faso needs to strategize in order to ensure that its economy reflects the current and future population.

POLICY IMPLICATION

Empirical findings from these countries show that at the family level, the capacity to plan the number and timing of childbirths dramatically affect household economic well-being through improved maternal and child health, and more productive use of time, human energy and income (Vizard *et al.*, 2011). Women stand to increase earnings the most, although their low status in many societies often limits this opportunity. Research conducted in these countries demonstrates that children in large families tend to be less well-nourished over the long term, (Yamin and Boulanger, 2013) which can undermine school performance and, hence, future earnings potential.

It is believed that parents with fewer offspring are able to invest more in each child than those with larger families. Studies show that, on average, children from smaller families attain higher levels of schooling. However, it is more difficult to demonstrate such changes in educational attainment in many countries in SSA, where students draw upon large extended families for school fees and other assistance. Notably, family size does not appear to influence school enrollment. Enrollment appears more closely related to the commitment of governments to universal education, (Yamin and Boulanger, 2013) and for girls, the cultural background of parents is likely to affect the percentage of school enrollments.

Moreover, high proportions of school-age children, characteristic of these countries experiencing rapid population growth, undoubtedly put pressure on existing school and health care facilities. When school enrollments and average educational attainment increase rapidly, governments can expect upward pressure on national education budgets. In the absence of even more rapid growth in government revenues or major shifts in government spending priorities, this tends to depress public education expenditures per student. Yet most these countries do shift priorities, continuing to make substantial gains in schooling and health despite the budgetary pressures. Even in the case of countries that can adjust to their present rates of population growth, economists recognize that it takes time and effort for government and other institutions to expand urban infrastructure, provide new and better health and educational services, successfully integrate technology, enforce environmental regulations and expand trade (Grindle, 2004).

From the above views, empirical evidence shows that countries with a fundamentally sound population policy have low population growth rates and experience high economic growth in general. On the other hand, countries without a sound population policy have a high population growth rate which ultimately leads to lower economic growth.

RECOMMENDATIONS

In this light, it can be said that a balance between population growth and sustainable development is not a one night achievement in any society. All societies are still struggling to ensure proper match between its population and development. However, sound sustainable development strategies for SSA must reflect its multi-ethnic and cultural diversity and other aspects of population. To this end, it is recommended that:

In overall, as noted by Herrmann (2012), in order to promote a match between population growth and sustainable development, SSA countries need to ensure universal access to sexual and reproductive health care and family planning; investment in education with a particular focus on gender parity; the empowerment of women; and the systematic integration of population projections in development strategies and policies. Strategies and policies must require that mandatory population policies be avoided, balance reproductive rights with the other human rights undermined by population growth are considered and the moral and practical importance of considering consumption rates as well as population growth.

Specifically, SSA countries should to ensure that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes. With increasing levels of education, the number of children per woman and the high number of unwanted pregnancies, for which a quarter of the population growth is attributed to, will decrease. Investments in the education system, mainly in the education of women, and in the health care system are not only elementary laws of human rights, but rather, they also count as population policies.

Furthermore, population policies must be broadened from fertility reduction to the realization of women's and girls' human rights and capabilities. Girls who stay in school longer have fewer children because they marry later. They are also more likely to want fewer children as they want to pursue a career and enjoy greater power to negotiate contraception use. This is to say that sustainable development cannot be achieved unless all women and girls enjoy universal access to sexual and reproductive health and rights over the life cycle, enabling them to make free and informed decisions about sex and reproduction. This requires the development of policies and legal frameworks and the strengthening of health systems to provide universally accessible quality sexual and reproductive health services, information and education across the life cycle, including on safe and effective methods of modern contraception, comprehensive sexuality education and maternal health care. For the full realization of sexual and reproductive health and rights, governments have a responsibility to ensure that along with other essential services, health services are available, accessible, acceptable and of appropriate quality for all. This requires targeted measures to address the structural inequalities, stigma and discrimination that limit access to health services for women and girls.

FUTURE RESEARCH DIRECTIONS

Future research directions need to ascertain the extent to which African traditional taboos, norms and cultural heritage has been advantageous in ensuring a balance between population growth and sustainable development.

CONCLUSION

The above discussion on the overview of population growth and sustainable development has identified many of the challenges posed by the enduring legacy of population paradigms and models that are deeply rooted in development thinking and practice. There is no doubt that population growth in Sub-Saharan Africa is indeed a real and challenging phenomenon. The impacts are manifested through resource depletion and the resultant environmental problems. The discussion has demonstrated that an increase in the number of people has a negative implication to the development. That is continued population growth in many countries in Sub-Saharan Africa driven by persistent high fertility, will make it harder for their Governments to eradicate poverty and inequality, combat hunger and malnutrition, invest in education and health, improve access to basic services, plan and develop cities, protect local ecosystems and promote peaceful and inclusive societies. However, slower population growth would enable families and Governments in Sub-Saharan Africa to invest more in the health and education of each child, creating a virtuous circle with benefits for the economic, social and environmental dimensions of sustainable development. Regardless of adverse effects of rapid population growth, SSA countries are among the countries in the world which have potential to grow in terms of economic development. This may be possible if they strategize on implementing population policies that lead to demographic dividend like China, India and other Tiger countries.

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KEY TERMS AND DEFINITIONS

Development: Is a process of improving people's wellbeing and their capacity in terms of economic, social, political, and cultural systems on a sustainable and long-term basis.

Economic Growth: Is defined as an increase in per capita income of people in a given area over a period of one year.

Population: Is a total number of people residing in an area in a given period of time.

Population Growth: Is an increase of people in a given area due to increased fertility and/or a decrease of mortality and/or immigration.

Population Policy: Is defined as a measure which a country or an authority engages in to ensure optimal level of population and proper utilization of resources.

Reproductive Health: Implies a state of people's safe reproductive life and their capability to reproduce and decide the number as well as space of children. It involves both men and women.

Sustainability: Is defined as the ability to exploit resources for better change in aspects of cultural, economic, social, environmental, and political systems without depleting the resources for present and future generations.