Section 39 (Population and Development)
Title: Rapid Population Growth and Development in Ghana

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Ghana's Demographic and Health Surveys 1988 and 1993, and Ghana's 1984 Population Census report were used to examine the effect of rapid population growth on 4 key sectors in Ghana. The population issue in Ghana concerns the high rate of growth and not the number of people. The rapidly increasing expenditure on education is associated with sharp increases in the proportion of eligible children attending school. Repeated pregnancies and births affect health conditions of child and mother while more people produce more waste causing additional stress on earth's assimilative capacity. Three population projections were prepared using the Spectrum Computer Package from 1990-2020, each based on high, medium and low fertility and mortality assumptions as enumerated in Ghana's National Population Policy. If fertility declines as assumed in the low fertility assumption, the population of Ghana will be 30.7 million by the year 2020, with the medium assumption, total population will be 33.6 million. However, with the high assumption, Ghana's population will reach 35.2 million by 2020. These three population projections were subsequently employed to highlight the impact of population on Ghana's Economic, Education, Health, and Environment sectors.

RAPID POPULATION GROWTH AND DEVELOPMENT IN GHANA

ERIC ADJEI BOADU

1 INTRODUCTION

There is a growing consensus in Ghana that while rapid population growth may not prevent economic growth, economic improvements will occur more rapidly without this obstacle. A slower rate of population growth will ensure that more people will have better access to health care and social amenities (Population Impact Project, 1994).

It must be emphasized that the population issue in Ghana concerns the high growth rate of about 2.9% and not the number of people. In terms of absolute numbers, Ghana cannot be considered as over populated. The United Kingdom for example with about the same land area as Ghana (UK is 93,283 sq. miles and Ghana 87,853 sq. miles) has more than three times Ghana's population (UK 59.1 million, Ghana 18.9 million, World Population Data Sheet 1998).

In Ghana, the warning that rapid population growth could be an obstacle to development was not taken seriously by the previous governments. There was large influx of foreign nationals, particularly those from sister African countries. This was confirmed in the 1960 population census in which 12.3% of the population was estimated to be foreigners. This situation persisted until 1969 when the issues of population was recognised as a critical factor in development by the intellectuals as well as the political leaders of this country. Ghana then became the third country in Sub-Saharan Africa to come out with a comprehensive population policy in 1969 after Mauritius (1958) and Kenya (1967). The policy was meant to affect the growth, structure or distribution of the country's growing population.

Rapid Population growth means higher dependency burden which forces the young population to work to supplement the family income. It also creates social pressures on the government to spend more on the welfare of the people in order to maintain a minimum standard of living.

Education occupies a highly important place in most plans for socio-economic development. In Ghana, the sector is important as a supplier of the trained manpower that is a prerequisite for the accomplishment of other development goals. The rapidly increasing expenditure on education has been associated with sharp increases in the proportion of eligible children attending school. Upgrading the country's human resources through education can therefore be achieved more quickly and at less cost if the birth rate is lowered.

Repeated pregnancies and births have affected health conditions in Ghana resulting in birth complications, infectious diseases among infants and children

and maternal morbidity and mortality. Even though over time the health services in the country have improved considerably, widespread preventable communicable diseases among children and women of reproductive ages still persist in the country.

More people produce more waste and then cause additional stress on earth's assimilative capacity. The environment is vital to supporting life and providing inputs for production and so in Ghana, there has been an increasing concern about the effects of economic activities on the environment. In particular, intellectuals argue that economic activities have caused serious environmental damage and that, the current state of the environment will constrain future economic development.

1.1 Country Background

The Republic of Ghana lies on the West Coast of Africa. It has a total area of 238,537 square kilometres (87,853 sq. miles). The country can be roughly divided into three vegetation zones, namely coastal Savannah characterised by shrubs and mangrove swamps, a forest belt that gradually thins out into a dry Savannah as one moves northwards.

Ghana has ten administrative regions, these are Greater Accra, Eastern, Western, Ashanti Central, Brong-Ahafo, Northern, Volta, Upper East, and Upper West Regions which are further divided, into 110 districts; these form the basic units of political administration. The capital town of Ghana is Accra.

The Ghanaian population is made up of many ethnic groups. The largest, the Akans, accounts for 44% of the population. Other major ethnic groups are the Mole-Dagdani (16%), Ewe (13%), Ga-Adamgbe (18%), Gruma (4%) and Grussi (2%) a number of smaller ethnic groups make up the remainder. The prevailing religious beliefs and practices may be divided into 3 major groups namely, Christianity, Islam and Animism which account for 42%, 15% and 43% of the population respectively (GDHS 1993).

The economy of Ghana is mixed, consisting mainly of small capital intensive modern sector involving mining and a few manufacturing establishments, a growing informal sector of small businessmen, artisans and technicians and a large traditional agricultural sector made up mostly of small-scale peasant farmers. The agricultural sector alone absorbs three-fifths of the country's labour force and accounts for more than half (51%) of the Gross Domestic Product.

The duration of basic education has been reduced from 10-15 years to 9 years. This includes 6 years of primary education and 3 year of Junior Secondary Education (J.S.S.). J.S.S. is followed by an optional additional 3 years of Senior Secondary Education. These reforms seek to improve access to education for all children, increase the proportion of females in school, and increase the proportion that completes a given level of education.

1.2 Statement of the problem

Overall, Ghana's population and characteristics pose serious challenges for her development and not until Ghana achieve considerable fertility decline within the next few years, the nations development efforts will be frustrated. Her annual population growth rate is among the highest in the world. It has hovered around 2.9 and 3.1% since 1984 compared with the average rate of 0.6% for the developed world. For the foregoing, the following problems may be identified among others.

1. High population growth rate induced by sustained high fertility and declining mortality rate arising from increased access to health delivery system.
2. High pressure on land arising from increasing population growth rate and increasing competing demand for land for economic and residential purposes.
3. High age and economic dependency and rising level of unemployment.

1.3 Objective of the research

1. To examine the effects of rapid population growth on 4 key sectors of the Ghanaian economy which are crucial for socio-economic development. These are the Economic sector, Education, Health, and the Environment.
2. Examine the relationship between population and development in Ghana.
3. To increase the awareness of government, community and opinion leaders and the general public on the need to support population policy programmes so as to enable them to advance the interest of overall national development.

1.4 Methodology

The research uses descriptive analysis to show population change that has occurred in Ghana during the past decades in order to use the results to predict the future population till the year 2020. For projections the study used the Spectrum Computer Package whereby the interpolation technique was applied.

1.5 Data sources

Data used for this research were collected from the concerned Ministries in Ghana, Ghana Statistical Service, Ghana Demographic and Health Surveys 1988 and 1993. Census report of Ghana, 1984 and World Population Prospects, 1994 Revision.

1.6 Organization of the study

The paper is organized into four (4) Sections. The first, which is the introductory section, is subdivided into country background, statement of the

problem, objectives of the study, methodology, data sources and literature review. The Second Section is Population Growth and the characteristics of Ghana's population. The third section discuses the major challenges of rapid population growth on four (4) sectors of the Ghanaian economy. The fourth section is the conclusions and recommendations.

1.7 Literature Review

Coal and Hoover (1972) in their book "Population growth and development in low income countries" stated that the pace of economic development depends on the diversion of resources from consumption to uses that raise future output. A population with a high ratio of dependents on producers consumes more of a given output and devotes less to investments. Thus, high fertility, which produces a high level of dependency, promotes consumption at the expense of investment.

Borrce (1973) in his book "Population, environment and society" said that population problem is much with us today. It is seen to permeate almost every corner of society whether the topic is inadequate housing, the expanding cohorts of young requiring education, the problems of employment, and even the levels of crime. In developing counties, rapid population growth is seen as a major barrier to the process of development whereas in developed countries, people are seen as polluters, destroying natural environments with the ever-rising volume of wastes, which are the products of their affluence. He said, back to the 1930s the "population problem" was also a live issue then, but the "problem" was then seen as almost the direct opposite of the factors causing concern today.

Thirlwal (1973) in his book "Growth and development with special reference to developing economics" said, the relationship between population growth and economic development is a complex one, particularly concerning what is cause and what is effect. Many people consider rapid population growth in the third world to be a major obstacle to development, yet there are many ways in which population growth may be a stimulus to progress, and there are many rational reasons why families in developing countries choose to have many children. He said, the complexity of the subject is compounded by the fact that, economic development is a multidimensional concept.

The United Nations World Population Conference held in Bucharest in 1974 adopted a world Population Plan of Action that asserted "population and development are interrelated, population variables influence development and are also influenced by them". The plan recommended that "population measures and programmes should be integrated into comprehensive social and economic plans and programmes and this integration should be reflected in the goals, instrumentality and organizations for planning within the countries.

Clark (1977) in his book "Population growth and land use" stated that population growth is the only force powerful enough to push primitive communities to change their methods, and in the long run transform them into

such more advanced and productive societies. Moreover, Clark supported the argument of Ibn Khaldun, the great Arab philosopher and historian in the 14th Century that the product of two men working together would be more than twice that they would have produced working independently.

Lloyd and Gage-Brandon (1994) in their paper "High fertility and children's schooling in Ghana: sex differences in parental contribution and educational outcomes" said that in Ghana, girls with many younger siblings are less likely to be enrolled in schools than boys. Seeking future security in their old age, parents prefer to educate sons to daughters. Girls are also more likely than boys to drop out of school to care for younger siblings. The probability of dropouts for boys increases as the number of older siblings increases. He concluded that, high fertility reduces educational attainment at higher levels and increases the workload and financial responsibilities among older siblings.

2 POPULATION GROWTH

2.1 The Demographic Transition

The demographic transition is used to designate a process of fundamental change in the demographic behaviour of population. Traditional high levels of mortality and fertility, resulting in low growth rates, are gradually transformed into relatively low levels of mortality and fertility. Often there is a time lag in the fertility decline compared to the mortality decline, however, resulting in high population growth rate.

Fertility, mortality and migration are the three factors responsible for population change. For lack of adequate data on migration, we will discuss only fertility and mortality. In Table (1), while the crude death rate (CDR) declined from nearly 22 deaths per 1000 persons in 1955 to 12 deaths in 1990, the crude birth rate (CBR) remained nearly constant, starting at 48 births per 1000 persons in 1955 and ending at 44 births in 1990. The difference between the CBR and CDR is the crude rate of natural increase, a measure of how rapidly the population is growing.

Table (1) Crude Rate of Natural Increase

	1950	**1955**	**1960**	**1965**	**1970**	**1975**	**1980**	**1985**	**1990**
CBR/1000	48.3	**47.9**	**47.6**	**46.8**	**45.8**	**45.1**	**45.2**	**44.3**	**44.0**
CDR/1000	21.7	**20.1**	**18.7**	**17.5**	**15.8**	**15.3**	**14.3**	**12.1**	**12.0**
Difference	26.6	**27.8**	**28.9**	**29.3**	**30.0**	**29.8**	**30.9**	**31.2**	**32.0**

Source: World Population Prospects, 1994 Revision.

2.2 Population growth in Ghana

In 1969, the government adopted the population policy. The document was entitled **Population planing for national progress and prosperity.** It stated that:

> *"unless birth rates can be brought down to parallel with falling death rates, Ghana's population would climb at a rate, dangerous to continuing prosperity, and the children of the next few generations will be born into a world where their very numbers may condemn them to life-long poverty"* (Government of Ghana, 1969)

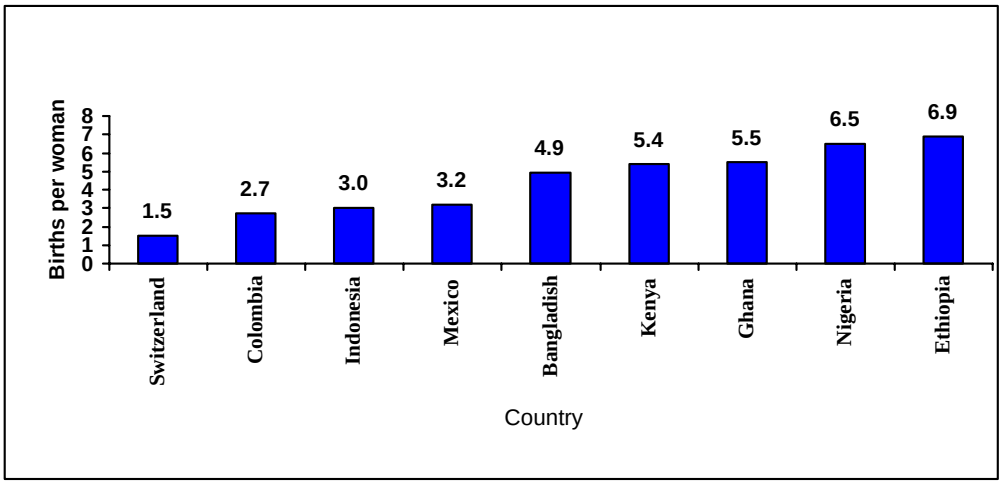
However, after more than two decades of it's implementation, it was observed that in terms of overall achievement, the policy made only modest gains. Several factors account for this dismal performance. Of these, perhaps the most significant was the absence of a well-articulated and co-ordinated institutional machinery to translate policy objectives into Action plans.

2.3 Characteristics of Ghana's Population

As is the case in many African countries, the present high level of Ghana's population growth results from persistent high birth rates and declining mortality rates over the years. Consequently, the rate of increase of the population has been high about 3.1% per year. At this rate, Ghana's population will double in 25 years compared to a country like the United Kingdom's rate of 0.2 which will take about 267 years to double her population (Population Data sheet, 1998). For a variety of social and economic reasons, large families continue to be attractive to many Ghanaians.

Fertility: Various estimates of the level of fertility obtained from censuses and surveys indicate that the level of fertility in Ghana has remained at a very high level over a fairly long period. If completed family size as measured by the average number of children ever born to women aged 45-49 is used as an index of the level of fertility, the indices range from 5.9 children per woman in 1960, 6.4 in 1971, 6.7 in 1979/80 and 6.4 in 1988. The Ghanaian woman according to the 1993 DHS bears about 5.5 children during her reproductive life as against 1.5 in Switzerland, 2.7 in Colombia, 3.0 in Indonesia, 3.2 in Mexico, 4.9 in Bangladesh, 5.4 in Kenya, 6.5 in Nigeria and 6.9 in Ethiopia (See Figure 1). Most developed countries aim at reducing their total fertility rate to about 2 (replacement level). In the case of Ghana, a total fertility rate of 3 is considered ideal for now. However, high fertility rates will persist for sometime because of the large number of couples in their childbearing years.

Figure (1) Total Fertility Rates among selected Countries



Source: Population Reference Bureau's 1993, Population Data sheet 1994

Mortality: Available evidence indicates that unlike fertility, the death rate in Ghana has been steadily declining over the years. The introduction of modern health care meant to improve health facilities and services and family health education programmes has reduced deaths and helped children to survive to adulthood.

Migration: There is a high degree of both internal and international mobility among the population. Annually, Ghana receives a large number of immigrants most of whom come from the neighbouring countries of West Africa. Restrictions on immigration and residence of foreigners such as the Aliens Compliance Order of 1969 which made it illegal for aliens without resident permit to continue living in Ghana, has failed to completely dry up this source of population. It is believed that perhaps equally large number of Ghanaians live abroad, most of them in the neighbouring African countries such as Nigeria, Cameroon, the Gambia, Sierra Leone and Zaire.

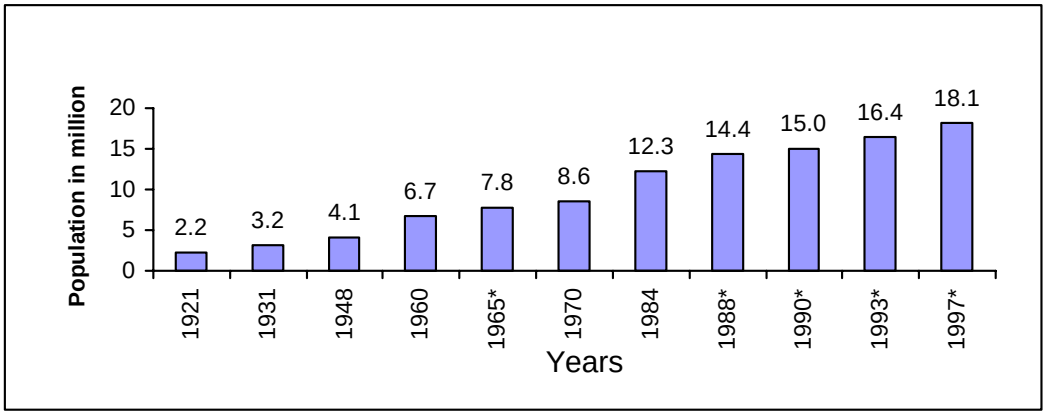
Population Density: The country's population density increased from 28 persons per square km. in 1960 to 36 in 1970, it was 51 in 1984 and 60.4 in 1990. Within the country, population densities vary widely between the north and the south, between urban and rural areas. In 1988 the greatest densities were in the Greater Accra region with 438 persons per square km. followed by Eastern region with 87 persons per square km. The Northern region recorded the lowest density of 17 persons per square km. These are not large as compared with those of such population giants as China, India and even Nigeria Ghana's neighbour.

Rural-urban population: In Ghana, settlements with populations of 5,000 or more are statistically described as urban while those with less than 5,000 are classified as rural. Today, nearly 1/3 of all Ghanaians live in towns or cities and more than 1/5 in Accra alone.

The high population growth rate is also reflected in the rapid growth of cities and towns with their attendant problems. For instance; in 1948 there were 39 towns in Ghana with a total population of 534,918 representing 12.8% of the country's total population. In 1960, the number of towns rose to 98 with a population of 1,551,174 constituting 23.1% of the total population. By 1970 the number of towns had risen to 135 with a population of 2,472465 constituting 28% of the total population. From 1970 to 1984, the proportion of the population living in urban areas has risen from 28% to 31.3%. Greater Accra region stands out as the most urbanized (84.3%) with Upper East region as the least urbanized (8.5%).

On the whole, while 27% was recorded as the increase in total population from 1960 to 1970 that for urban areas were about 60% probably due to favourable economic policies. Population distribution tends to follow the location of local resources like economic activities and in Ghana, most economic activities are concentrated in the productive areas of the forest zones and the coastal Savanna (Engmann, 1965, 1972a, 1972b). The majority of Ghanaians, about 70% according to the 1984 census, lives in rural areas and these are engaged in traditional activities such as farming and fishing. This is exceptionally so because urban–based development policies have left the rural areas without adequate facilities, basic amenities and meaningful employment avenues.

Figure (2) Historical Population Growth of Ghana



* Estimates
Source: Ghana statistical Service and various Census Reports

Figure (2) shows the historical population growth of Ghana. With a population of 2.2 million in 1921, Ghana's population almost doubled within a period of 27 years, reaching 4.1 million in 1948. The 1984 census report puts Ghana's population at 12.3 million and various estimates in 1997 showed that Ghana's population is around 18 million.

2.4 The Revised Population Policy of Ghana, 1994

As a result of the dismal performance of the 1969 Population policy, there was a revision in 1994. In order to provide a basis for assessing, monitoring and evaluating the overall success of specific programmes and activities initiated in pursuit of policy objectives, the policy has explicitly specified a wide range of implementation strategies to be pursued in order to achieve the specific objectives and targets (refer to the Revised National Population Policy of Ghana, 1994).

2.5 Future Trends of Population Growth in Ghana

Rapid population growth produces a youthful population, which implies a high dependency burden for the country. Secondly, the uneven spatial population distribution in the country militates effectively against development. The next issue of demographic importance is the future trend of population growth.

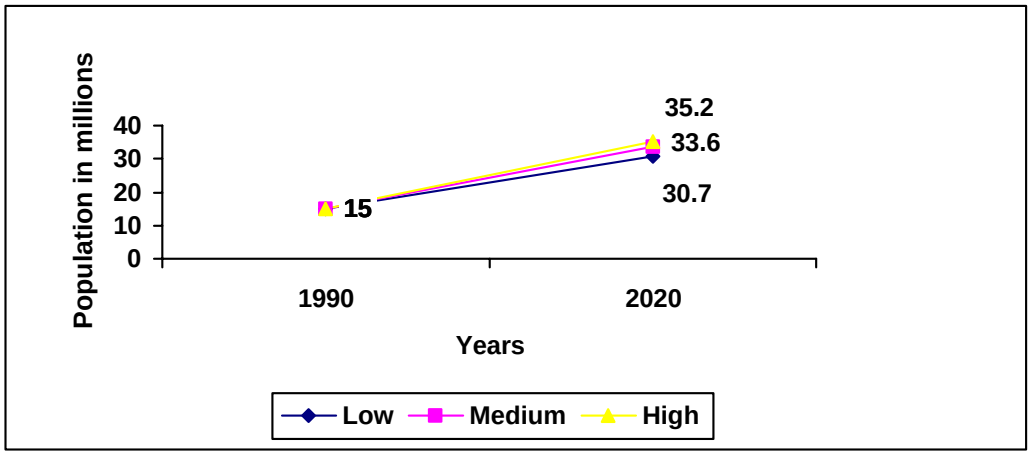
For ease of comparison, three population projections are prepared from 1990-2020, each based on different assumptions regarding future fertility and mortality i.e. a High, Medium and Low fertility (See Table 2).

Table (2) Fertility and Mortality Assumptions

Years	Annual Growth Rate			Total Fertility Rate			Crude Birth Rate			Crude Death Rate			Life Expectancy		
	H	M	L	H	M	L	H	M	L	H	M	L	Male	Female	Both Sex
1990	3.0	3.0	3.0	6.0	6.0	6.0	44.0	44.0	44.0	12.0	12.0	12.0	54.2	57.8	56.0
1995	3.1	2.9	2.8	5.8	5.5	5.4	41.0	39.4	38.9	10.6	10.5	10.4	56.2	59.9	58.0
2000	2.9	2.8	2.7	5.5	5.1	4.9	39.0	37.5	36.7	9.5	9.4	9.4	58.2	61.9	60.0
2005	2.8	2.7	2.6	5.1	4.7	4.4	37.3	35.6	34.6	8.5	8.5	8.4	60.2	63.9	62.0
2010	2.7	2.6	2.4	4.7	4.2	4.0	35.4	33.4	32.0	7.6	7.6	7.5	62.2	65.9	64.0
2015	2.7	2.5	2.3	4.5	4.0	3.6	35.0	32.4	30.0	7.4	7.2	7.0	63.2	66.9	65.5
2020	2.6	2.4	2.2	4.2	3.8	3.0	33.1	30.7	29.0	6.8	6.8	6.7	64.2	67.8	66.0

Source: World Population Prospects, 1994 Revision.
H=High, M=Medium, L=Low

Figure (3) Population Projection 1990-2020



Source: Projected from Table 2 using Spectrum System of policy models.

If the population policy is successful and fertility declines as assumed in the low fertility assumption, the population of Ghana will be 30.7 million by the year 2020, if fertility takes the medium assumption, total population will be 33.6 million. However, if fertility takes the high assumption, Ghana's population will reach 35.2 million by the year 2020 (See Figure 3). These three population projections are subsequently employed to highlight the impact of rapid population growth on selected sectors of the economy of Ghana.

2.6 The Dependent Population

In a fast growing population, the proportion of children increases faster than any other age group. A population is considered "young" if over 40% of its population are under age 15. In Ghana this proportion has been between 47% and 48% since the early 1950s. The economically productive age group (those between ages 15 and 64), has been just under 50% of the total population and those over 64 years old, about 3.0%. In Ghana there is roughly one dependent person (under 15 or over 64 years old) for every economically active adult (15-64) compared with about 2 adults per dependent in more developed countries like the U.S., Great Britain and Switzerland. This youthful age structure has serious demographic and economic implications for Ghana.

The need to provide for economically dependent persons put pressure on the resources of the government and individual households. Children are especially dependent as they usually do not work and are normally in school. They must be fed, housed, educated and provided health care services. The ability to care for the dependent population depends on the structure and stability of the economy and the income levels and organizational abilities of the populace.

2.7 School Enrolment Population

Due to extra ordinary government effort and investment in education, Ghana raised its primary school enrolment from 38% of the eligible age group in 1960 to about 71% in 1980. More recent figures show enrolment falling to about 60% of eligible children because of inadequate educational facilities, classrooms and the government's inability to fully support the free basic education concept. The proportion in secondary school rose from only 5% in 1960 to 36% in 1980 and remained at this level in the mid 1980s. Although the government has consistently devoted a large share of its budget to education (approximately 30% in 1988), the per pupil expenditure has declined from a high of US$20 in 1972 to a low of only US$1 in 1983. It is about US$18 per pupil, still below the 1972 rate because of large number of eligible students (Benneh, 1990).

2.8 Population and Health Care Services

Ghana has made considerable progress in overall levels of health care services since independence. Between 1965 and 1989, life expectancy at birth increased from 47 to 55 years in the last 23 years, the infant mortality rate declined by 36% from 122 to 77 deaths per 1000 live births according to the GDHS 1988. Moreover, nearly 3/4 (75%) of the children under 5 years of age have had at least one immunization.

Even though Ghana has made reasonable progress in the provision of health facilities to its population, a large percentage of the population especially in the rural areas has no access to modern health care. In 1988 and 1991 for instance, there were 965 and 582 physicians in Ghana respectively (those in public hospitals only) and more than 80% worked in the urban areas. In Accra, Korle-Bu Teaching Hospital alone had almost one-third of the total number of physicians and more than 51% of the number of nurses in Ghana.

Population size and growth affect the resources available to provide health-care services to the population. Although government's allocation grew from 6.3% of the total national budget for health services in 1974/75 to 9.0% in 1988, rapid population growth has caused the per capita government expenditure on health to decline. It fell from US$6 in 1972 to less than US$1 in 1983. While the per capita expenditure in 1988 was US$1.50, it was still far below the 1972 level.

Table (3) Distribution of some Health Facilities and Personnel by Region.

Regions	Hospitals	Clinics	Health Centres	Doc./Pop. Ratio	Bed/Pop. Ratio
Western	15	7	17	1: 27,923	1: 859
Central	11	9	31	1: 63,640	1: 770
G./Accra	12	9	19	1: 6,514	1: 408
Volta	15	17	38	1: 50,046	1: 530
Eastern	15	6	33	1: 55,983	1: 805
Ashanti	15	2	35	1: 19,714	1: 870
B./Ahafo	11	26	22	1:107,219	1:1059
Northern	8	17	14	1: 68,391	1:1455
U./West	4	-	9	1:109,790	1: 612
U./East	3	-	9	1:128,597	1: 157
All Regions	109	93	227	1: 25,750	1: 748

Source: Health statistics 1984, MOH statistics Division 1986.

Estimates show that expenditures for health services would be 60% lower by the year 2020 should fertility follow a low path rather than a high path. Such resources could be diverted into directly productive ventures.

The number and location of health facilities should be closely linked with the population of children and mothers (15-49 years) in the population who need more health care than any other group. Table (3) shows the distribution of some of the health facilities and personnel by region.

2.9 Population-Environment linkages: conceptual framework

The impact of population on the environment has often been mathematically given as **I = P x A x T,** where **I =** environmental impact, **P** = population size, **A** = affluence (which is measured by the average person's consumption of resources) and **T** = technologies (which disrupt the environment to provide goods consumed). (Ehrlich and Ehrlich, 1990; Zaba and Clarke, 1994). For example, an increase or decrease in **P**, **A,** or **T** will correspondingly raise or lower the environmental impact although equal change in either **P, A,** or **T** with the other factors remaining constant may not have the same effect in all regions of the world. It was in extending this logic that at the Rio conference in 1991 countries of the South felt that those of the North, through their excessive consumption patters and advanced technologies, have more adverse effects on the environment than countries of the South. Developing countries also with their large populations but limited economic advancement can generate a vast impact on the environment if only the P multiplier on the A and T factors is so large. (Ehrlich and Ehrlich, 1990). Thus population pressure due to high growth rates is one of the main proximate causes of environmental degradation in the South.

2.10 Population, environment and development

The basic goal of any development policy is to improve the quality of human life that is invariably linked with the quality of the environment. Since the United Nations Conference on Environment and Development at Rio de Janeiro in June 1991, there has been increased awareness that problems of the environment cannot be fully addressed without first considering population–environment linkages. It is clearly stressed in the final document of the United Nations International Conference on Population and Development (ICPD) held in Cairo in September 1994.

"Pressure on the environment may result from rapid population growth, distribution and migration especially in ecologically vulnerable ecosystems. Urbanisation and policies that do not recognise the need for rural development also create environmental problems." (UNICPD, 1994). The major objective of ICPD, 1994 is to integrate both the environment and population in development planning and activities.

2.11 Pressure on Land and Deforestation in Ghana

With the rapid population growth in Ghana, the prevailing traditional system of bush fallowing has come under even more pressure. The period when the land lies fallow has shortened and so, there has been over-cultivation, and in the absence of modern fertilizers, the soil has deteriorated. Deforestation has accelerated with the rising demand for land and fuel wood. Erosion, and other environmental damage has reduced the land's capacity to produce food.

3 MAJOR CHALLENGES

The first major challenge is that Ghana's population is growing at a very fast rate. The late Prime Minister of India, Indira Ghandi was reported as saying that *"if the population is growing at a fast rate, it is like someone trying to put up a building in flood waters, whatever he puts there is washed away"*.

The youthful nature of the Ghanaian population means more schools and hospitals must be built, drugs must be found to support the ever-growing children population. The crucial point is that these children are not producing anything, but are consuming whatever is being produced. That is a major challenge to Ghana's development.

Another major challenge is the fact that the population is unevenly distributed. It is estimated as per the 1960, 1970 and 1984 Ghana population census reports that almost 97% of the localities in Ghana have population of less than 1000 each. There is therefore high population concentration in few urban centres while vast areas particularly in the middle belt have sparse population densities. This has implications for the country's development because these settlements lack the

threshold population to justify the provision of certain social amenities and so there are numerous settlements which have been denied basic infrastructure.

Another important consequence of a young and fast growing population is the building up of "population momentum" i.e., even if fertility were to drop drastically to 2 children per woman, the population would continue to grow for roughly 40 years. The rapidly growing population of Ghana compounds the difficulty of realizing the goal of improving the quality of life of the people.

3.1 Challenges on the Economy

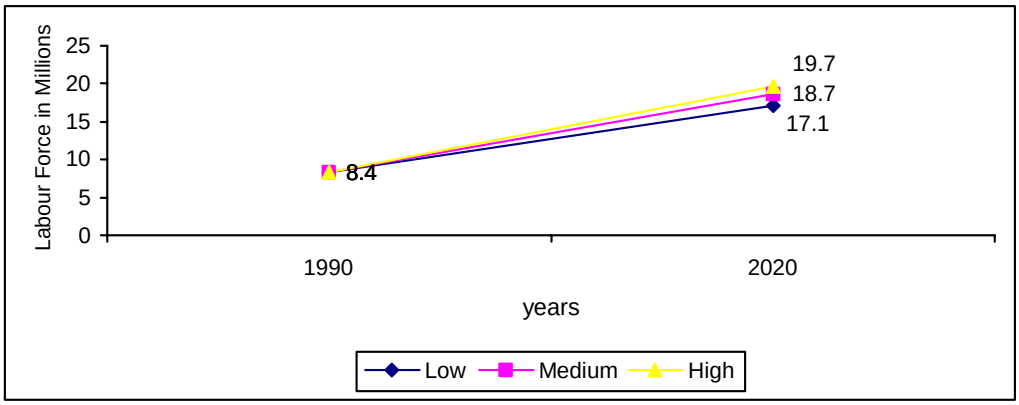
In Ghana, there is an increasing number of young people selling dog chains, car dusters and making shoeshine. In a sense, these represent the result of a rapidly growing population without a corresponding growth in the economy.

3.1.1 Labour Force

Of the 1970 population of 8.6 million, 3.3 million were estimated to be in the labour force and 3.1 were then employed, leaving a total of 198,571 unemployed. The 1984 census puts Ghana's population at 12.3 million and the projected labour force at about 5.6 million (ages 15-64) while the estimated number of unemployed was well above 200,000. About 51% of the 1984 population was in the labour force, about 46% were below working age (ages 0-4) and about 3% were out of the labour force (ages above 64). It is clear that Ghana has a predominantly young population, therefore the number of those in the labour force will continue to increase rapidly as the population increases with the passage of years (George Adamu, former Secretary for Mobilization and Productivity, PIP 1988).

In 1990, the total labour force in Ghana was estimated to be around 8.4 million. By 2020, based on the high fertility population projection, the labour force would be 19.7 million. For the medium assumption, the projected labour force would be 18.7 million. Comparing the size of the labour force to the children population, it becomes quite clear that from 1990, the dependency ratio has been almost one working adult supporting one child.

Figure (4) Labour Force 1990-2020

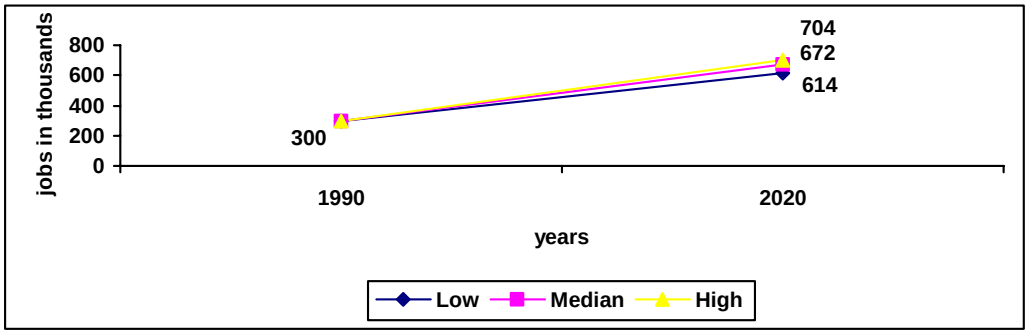


Computed from Table 2

On the contrary, if we take the lower and declining fertility scenario, i.e., where average Ghanaian woman gives birth to 3 instead of 5.5 children labour force will grow but to a smaller level 17.1 million. Economic burden will become lighter and there will be more people in the productive age than the children under 15 (See Figure 4). This provides clear evidence of the need to consider the population factor in economic development strategies.

3.1.2 New Jobs Required

Figure (5) New Jobs Required 1990-2020



Source: Computed from Table 2

Job creation in any country particularly in developing nations, usually falls on the government. In Ghana, the government is the largest single employer. This is rather a difficult obligation because the government is at the same time saddled with the provision of social services involving substantial spending of public funds, which are limited. Rapid growing of the labour force frustrates efforts to reduce unemployment through job creation programmes. Figure (5) shows that, in 1990, there were 300,000 jobs available under the high projection, we may need 704,000 jobs. Under the medium assumption, we may need 672,000 jobs as against 614,000 under the low projection by the year 2020. If the number of jobs created doesn't keep pace with the expanding labour force, unemployment will remain high or worsens ever time.

The 3 projections show that job creation programmes will be more successful if population growth is reduced. The question then is how many of these jobs can in reality be created each year given the country's precarious economic situation. The large number of jobs that would have to be created if fertility remains high points out how efforts to control Ghana's population can serve to reduce the socio-economic burden of unemployment. This means the economy must grow as to be able to absorb the new entrants in the job market.

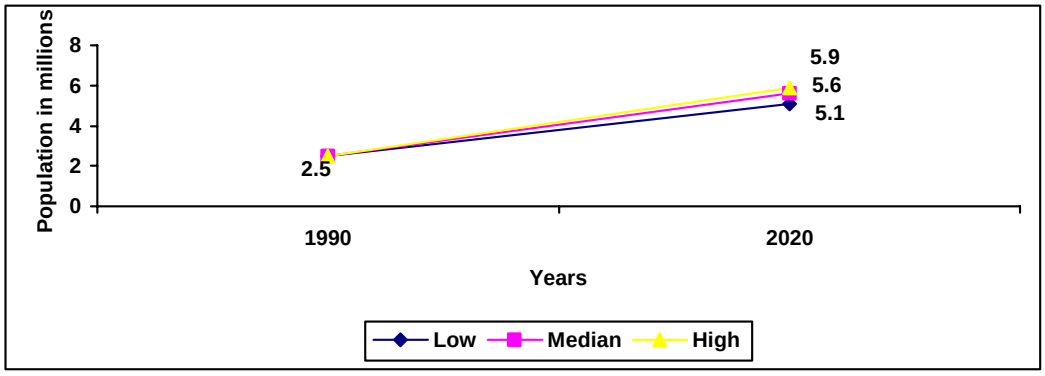
3.2 The Challenges on Education

Contributing to the decline in Ghana's per-pupil expenditure is the rapid growth of the school-age population. Population growth has led to a decline in the quality of education. In addition, an ever-growing number of children do not have access to any educational facilities. If the fast rate of population growth continuous, still greater numbers may not benefit from formal education.

3.2.1 Primary School Age Population

In 1990, the number of pupils in primary schools was about 2.5 million. Under the high fertility rate of projection, by 2020, we would have about 5.9 million new entrants. Under the medium assumption, the population would be 5.6 million as against 5.1 million under the low fertility projection (See Figure 6).

Figure (6) Primary School Age Population

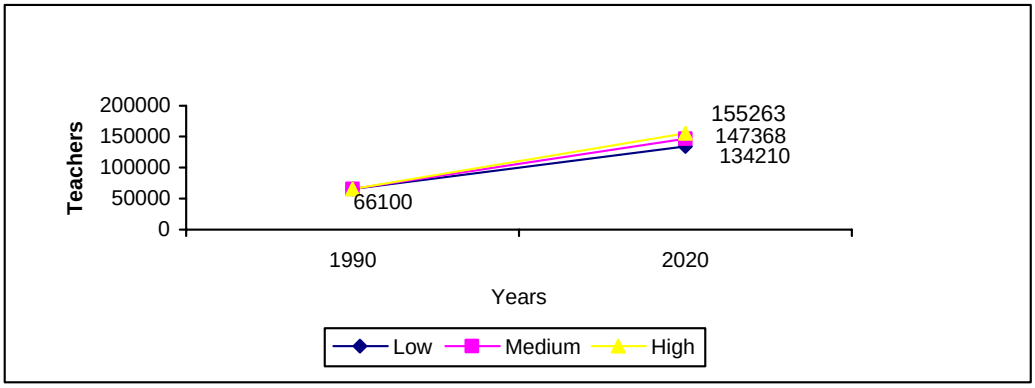


Source: Computed from table 2

3.2.2 Primary School Teachers Required

Considering the number of teachers required, we could find from Figure (7) that in 1990 we needed 66,100 teachers. By 2020 under the high assumption, 155,263 teachers will be required. Under the medium, 147,368 teachers would be required. However, under the condition of lower population growth, the current teacher-pupil ratio can be maintained with only 134,210 teachers by the year 2020. This is based on the assumption that one teacher would teach about 38 students. Presently, many of the schools in Ghana have one teacher to 45 or more students. This gives an idea of the investments required in the educational sector if we are to continue increasing our population at that fast rate.

Figure (7) Primary School Teachers Required



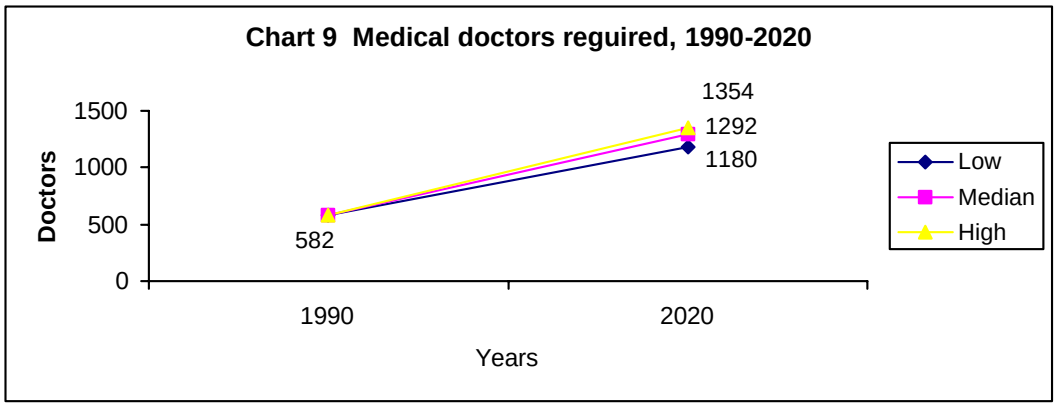
Source: Computed from table 2

3.3 The Challenges on Health

Health is another area in which population growth poses a major challenge to the nations development. The concern is not merely the health of the people per sey but also the impact of population growth on the quality of the health care systems.

3.3.1 Medical Doctors Required

Figure (8) Medical Doctors Required 1990-2020



Source: Computed from Table 2

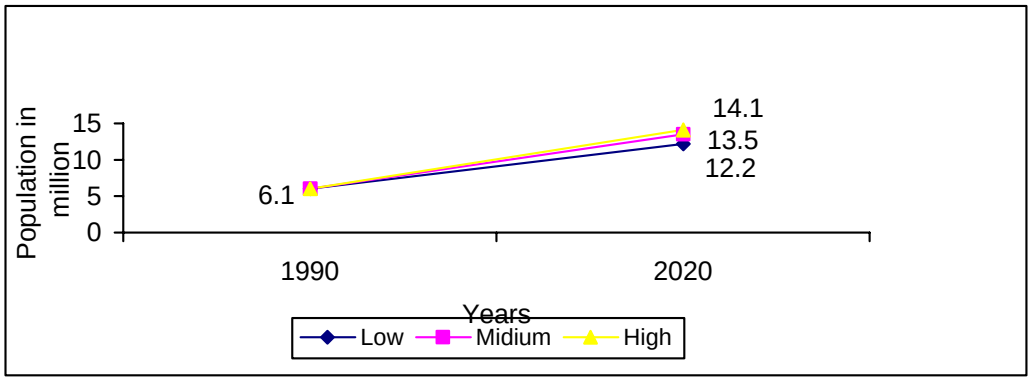
The World Health Organization Report 1997 puts the Physician-population ratio 121 doctors per 100,000 population and 232 nurses and midwives per 100,000 population. In Ghana (1990), the doctor–people ratio was 1 doctor to 26,000 people. To keep the ratio constant, as shown in Figure (8), projection of medical doctors required under the high fertility assumption shows that 1,354 doctors would be required. The medium assumption shows that 1,292 doctors would be required. In contrast, by 2020 under the low fertility situation, this would be less about 1,181(refers to doctors in public sectors only). At the same

time, the nation will need 28,490, 27,276 or 25,700 nurses under high, medium and low fertility rates respectively. The problem here is the number of years it takes to train a doctor and the amount of money involve.

3.3.2 Population at High Risk

Whenever we consider the structure of the population, we have a group that is normally described as the high-risk group because of the high demands they make on the health sector. These include children of 0-4 years, pregnant women and the aging population. A look at the components of the high-risk group in 1990 shows that they constituted 6.1 million of Ghana's population with the high fertility projection, by 2020, they will constitute 14.1million. For the medium assumption, they would constitute 13.4 million as against 12.2 million under a situation of low fertility (See Figure 9).

Figure (9) Population at High Risk 1990-2020



Source: Computed from table 2

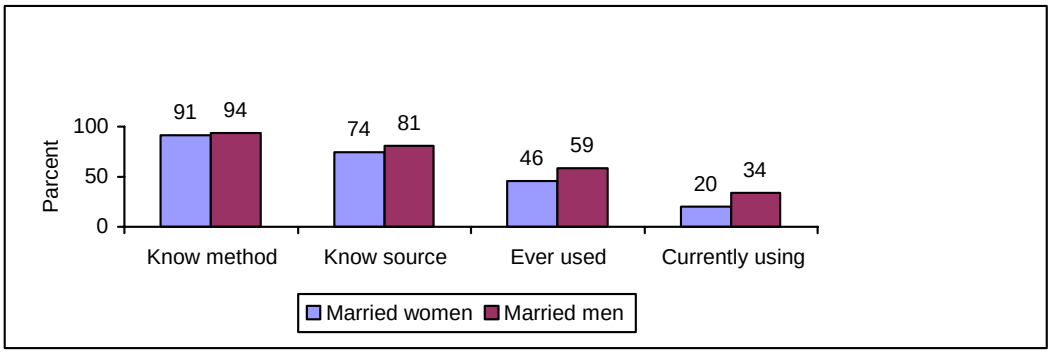
The message that this is portraying is that, if the Ghanaians continue giving birth to about 6 children, then the economy would cease to grow fast enough to adequately cater for the health needs of the population. If the fertility behaviour changes in favour of smaller family sizes such that each woman decides to settle for 3 instead of 6 children, then the resources required would be reduced, resulting in increased savings in all the sectors.

3.3.3 Knowledge and Use of Contraceptive Methods

Several efforts have been made to reduce the rate of population growth in Ghana but the results so far indicate that achievements have been moderate. A look at knowledge and use of family planing in Ghana shows interesting results. There is a wide discrepancy between knowledge and use of family planing methods. Knowledge of methods is by far higher than their use. More than 76% of all categories of people know of at least one method of family planing and yet the overall contraceptive use by 1988 was as low as 12.9% for any method and only 5.2% for modern methods. By 1993, while knowledge of family planing method was over 90% for married men and married women, contraceptive use (for any

method) was just about 20% and 34% respectively for married women and married men and about 10% for modern methods (See Figure 10).

Figure (10) Knowledge and Use of Family Planning



Source: GDHS 1993

Very few people were using the modern methods. For example, there is so much talk about condoms, but only 2% of the people were using condoms. Thus the majority of Ghanaians who practice contraceptive depend on the traditional methods both in rural and urban areas. Contraception use is higher in the urban areas (30.6%) than in the rural areas (15.4%) from GDHS 1993. This is so because urban areas have more educated people and in addition, have greater access to all the different types of contraceptive information and services available in the country.

In the 1993 GDHS, sexually active women who did not want to become pregnant but who are not currently using any contraceptive method and do not intend to use any in the future were asked to provide the main reason(s) for not using. Table (4) presents the percentage distribution of these women classified into 2 age ranges – those less than 30 years of age and those 30 years and over, according to reasons for not intending to use.

Table (4) Reasons for not Using Contraception, GDHS, 1993

Reasons for not using contraception	Age		Total
	15 - 29	30 – 49	
Want children	**45.9**	**25.9**	**32.8**
Lack of knowledge	**15.9**	**11.5**	**13.0**
Partner opposed	**1.9**	**1.7**	**1.8**
Cost	**0.0**	**0.4**	**0.3**
Side effect	**7.1**	**6.2**	**6.5**
Other health concerns	**2.4**	**2.7**	**2.6**
Hard to get pregnant	**0.5**	**0.4**	**0.5**
Religion	**3.3**	**1.7**	**2.3**
Opposed to family planning	**6.0**	**2.4**	**3.7**
Fatalistic	**3.8**	**2.9**	**3.2**
Other people opposed	**0.8**	**4.5**	**3.2**
Difficult to get pregnant	**5.4**	**16.3**	**12.5**
Menopausal/Had hysterectomy	**0.5**	**16.8**	**11.2**
Inconvenience	**1.4**	**1.3**	**1.3**
Other	**0.3**	**1.2**	**0.8**
Don't know	**4.1**	**3.5**	**3.7**
Total	**100.0**	**100.0**	**100.0**
Number	**368**	**695**	**1063**

Source: GDHS, 1993

3.4 The challenges on the Environment

As a result of population pressures, Ghana faces major environmental problems such as deforestation, soil erosion, pollution, and sanitation and waste disposal. While almost all rural dwellers use wood related fuels, a large number of urban dwellers also rely on wood products for energy. In 1988, firewood and other wood related fuels constituted about 85% of urban household fuels. This has increased the rate of tree destruction in the environs of the major urban centres causing deforestation and soil degradation thereby undermining the very resources that Ghanaian farmers and their families depend on.

The urban environment itself is also deteriorating. The rate of growth of Accra, and Tema for example, greatly exceeds the Accra Metropolitan Administration's ability to maintain existing services and to provide additional ones. The lack of efficient waste disposal methods in Accra has led to the dumping of waste into bodies of water such as the Korle Lagoon and the Odaw river (lies in the middle of Accra) resulting in the spread of diseases.

3.4.1 The Problem of Deforestation and Desertification

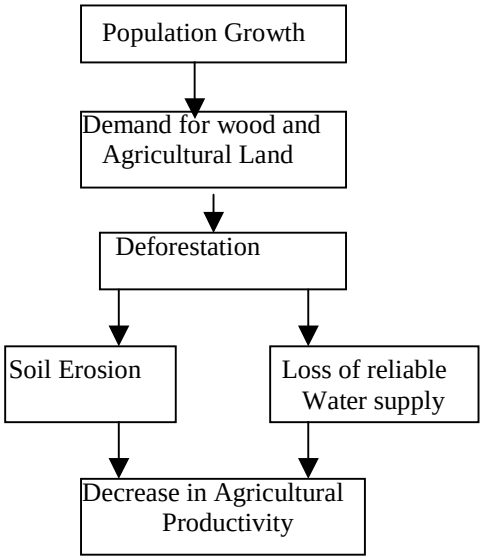
The attainment of sustainable development in any country would require economic and social development, as well as preservation of the productive natural resources. As Nana Sir Ofori Atta 1 (a chief in Ghana) was reported to have said in 1929 that, *"The land belongs to the dead, the living and countless generations yet unborn"*. This statement is not different from the Futures Group's definition of Sustainable Development i.e., *"Development that meets the needs of*

the present without compromising the ability of the future generation to meet their own needs" (The Future's Group 1988). This means that resources should be used to cater for the needs of not only those who are living at the moment but future generations as well. Sustainable development requires wise use of resources through effective preservation and conservation practices. Ghana is losing forestland at a very rapid rate. It is estimated that every year, 72,000 hectares of forestland is lost to agriculture through bush fires, fuel woodcutting, wasteful logging and through charcoal burning and over grazing. It is also estimated that about 70% of the reserved land are under threat of being encroached upon due to shortage of agricultural land Benneh, 1990). There has also been an immense pressure on the 6.5 million hectares which is outside the forest reserve. Thus in Northern Ghana, instead of deforestation, we rather have desertification particularly, in the northeastern area around Bawku.

3.4.2 The Cycle of Rapid Population Growth

Figure (11) shows the result of rapid population growth on the land. In the cycle, rapid population growth leads to high demand for fuelwood and agricultural land leading to deforestation. Deforestation leads to soil erosion and loss or reliable water supply, which results to a decrease in agricultural productivity.

Figure (11) Result of Rapid Population Growth on the Land



Source: The Futures Group, Ghana RAPID[1], Washington D.C., PIP 1994

RAPID[1] is an acronym which means Resource for the Awareness of Population Impact on Development

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

In Ghana, considerable population growth can be expected within this decade. This population growth is the outcome of a historically unparalleled constellation of fertility and mortality levels and trends during the past decades.

Education is an important factor in development, since progress in other sectors depend largely on the educational attainment of the populace. Education of Ghanaian women would be a contributing factor to proper health and nutritional practices that would also be positively associated with lower infant and child mortality as well as fertility. The rapid rate of population growth means however that, in spite of the heavy investments over the years in education, a substantial proportion of the young population will be denied access to quality education.

Although government expenditure on health has been increasing steadily in absolute terms over the past few years, per capita allocation or expenditure on health has been declining in real terms over the period due to the rapid rate of population increase.

It could be argued that it is a basic human right to be able to choose freely and responsibly the number and spacing of children. (The resolution endorsed by Bucharest Word Population Conference in 1974). But when over a sustained period, the population grows faster than the resources necessary to maintain the increasing numbers, problems of socio-economic development assume greater dimension. For a great majority of Ghana's population, the provision of basic needs such as food, housing, education, employment and health services has been inadequate.

The development of Ghana would be easy when the population problem is solved. For the economy to grow fast, it is necessary that the rate of population growth be reduced because of the already high dependency burden. So long as every adult works to support one child each in addition to him/herself, the adult cannot save enough to invest in order to increase his or her income.

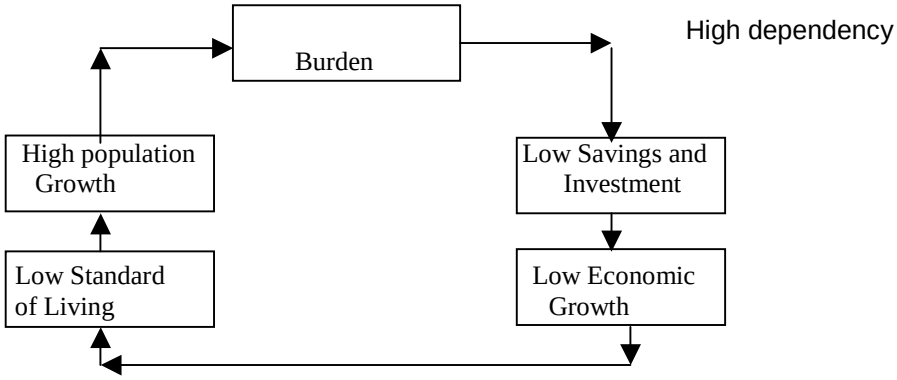
It must be noted here that in most cases, it is the poor who tend to give birth to more children as children are viewed as sources of economic security when parents become old. Thus, in a situation of mass poverty, rapid population growth is unavoidable.

As long as about 45% of the population of a particular country is below the age of 15 years, that country would have to use almost all its resources in providing all the services including food, education, health etc. Hence, that country would not be able to invest in order to promote rapid economic growth.

Consequently, economic development stagnates with deterioration in standard of living.

To substantiate this, the population development interrelationship exists in a form of what is described as the "Cycle of Rapid Population Growth". In this cycle, rapid population growth results in a high dependency burden, which in turn creates a situation of low savings and investments. Economic growth stagnates or slows down and eventually standard of living of the population deteriorates (See Figure 12).

Figure (12) The Vicious Cycle of Rapid Population Growth.



Source: Ghana RAPID, PIP 1994

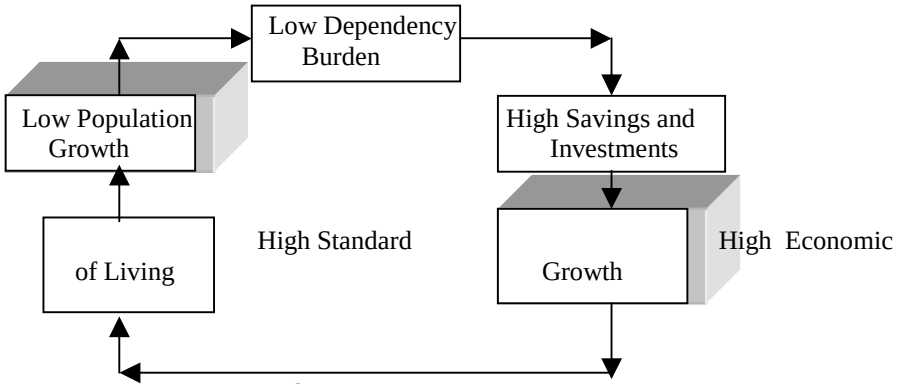
4.2 Recommendations

Based on the above discussions, the following recommendations can be put forward:

- There must be a continues effort to arrest the rapid population growth rate so as to increase the capacity to save and to invest at both the individual and national levels. This will ultimately lead to the creation of new job opportunities and expansion of productive resources.
- There must be an overall long-term policies to protect the environment.
- The 1994 Revised Population Policy objectives, targets and implementation strategies must be strictly adhered to as specified in the policy document.

Two approaches are suggested here for the attainment the above goals. One is through family planing, i.e., increasing the use of contraception throughout the country (an integrated family planning programmes). The second is through economic growth approach where sound socio-economic policies such as the implementation of Economic Recovery Programme and increased female education have to be employed. This will increase the socio-economic status of the population who will voluntarily opt for smaller family sizes. When these become successful, Ghana would be able to break through her rapid cycle of population growth (See Figure 13).

Figure (13) Breaking the Vicious Cycle of Rapid Population Growth.



Source: Ghana RAPID, PIP 1994

These two approaches however, have to be pursued simultaneously. Population issues and national development are inseparable. Solving population problems means developing the nation. However, we should also not lose the sight that the human being is the centrepiece of development, in view of the fact that, the population is both the instrument and object of development. It is important that population variables are integrated in development planning process at all levels so as to make the desired impact. Not until these strategies are adopted, overall national development will continue to be a fantasy.

REFERENCES

Borrce, W. D. (1973) Population, environment and society, University of Auckland, New Zealand.

Clark, C. (1977) Population growth and land use, The Machmillan press LTD, London.

Coal, A. J. and Hoover, E. M. (1972) Population growth and economic development in low-income countries, Princeton University Press.

Frejka, T. (1975) The demographic background to development planning. In Robinson W. C. (ed), Population and development planning. The Population Council, NY, Pp. 27-43.

Jones, G. W. (1975) Educational planning and population growth. In Robinson W. C. (ed), Population and development planning. The Population Council NY, Pp. 69-85.

Robinson, W. C. (1975) Toward socio-economic population planning. In Robinson (ed), Population and development planning. The Population Council, NY, Pp. 223-226.

El-Biblawi, H. A. (1978) Population change and its implication for the prospects of economic development in Ghana. Cairo University Institute of African Researchers and Studies, Dept. of Political and Economical Systems and Cairo Demographic Centre. Theses submitted in partial fulfillment for the degree of Master in African studies.

Thirlwall, A. P. (1993) Growth and Development with special reference to developing economies, University of Kent at Canterbury, 5th Edition. Pp. 143-155.

International Conference of Population and Development (ICPD), Cairo 1994.

The United Nations World Population conference, Bucharest, 1974.

STATISTICAL SOURCES AND OFFICIAL PUBLICATIONS

Benneh G. Population Growth and Development in Ghana (PIP/Ghana booklet) revised 1990

Ghana Statistical Service, Census Report, Ghana 1984

Ghana Statistical Service 1988 and 1993 DHS by Institute for Resource Development/Macro Systems, Inc. Columbia, Maryland USA and Intervention Inc. Calverton, Maryland USA respectively.

Government of Ghana, National Population Policy, Revised edition, 1994.

Lloyed C. B., Gage- Brandon A. J. High Fertility and children's Schooling in Ghana: Sex differences in parental contributions and educational outcomes (pop. Studies, 1994).

Managing Ghana's population (an overview) A publication of the National Population Council Secretariat, Accra.

Nabila J. S. Population, Environment and Developments. The African Dilemma (Dept. of Geog. & Res. Dev., University of Ghana, Legon.

Population and Development (PIP/Ghana booklet 1994.

Population and Environment (PIP/Ghana booklet) July 1990 by Obeng L. E.

Some implications of rapid population growth in Ghana (Interviews with members of government PIP publication 1988.