

CHAPTER 2

SOCIO-ECONOMIC DEVELOPMENT IN THE LONG TERM

INTRODUCTION

Vision 2016

2.1 The importance of developing a long-term socio-economic development perspective was given recognition through the development in 1997 of “**A Long-Term Vision for Botswana: Towards Prosperity for All**”, popularly known in short as **Vision 2016**. While the national development plans in Botswana have always been guided by the four national principles of *Democracy, Development, Self-reliance and Unity* and they are still considered valid, Vision 2016 argues for a refocusing of these principles to embrace change and to relate them to the country’s current development challenges. The Vision characterises what Botswana should be by the year 2016 by identifying goals to be reached, the major challenges that must be met and opportunities that must be productively exploited to attain these national aspirations.

2.2 Vision 2016 calls for a transformation of Botswana into a nation which is ‘*educated and informed*’, ‘*prosperous, productive and innovative*’, ‘*compassionate, just and caring*’, ‘*safe and secure*’, ‘*open, democratic and accountable*’, ‘*moral and tolerant*’, and ‘*united and proud*’. The Vision therefore provides Botswana with a long term socio-economic planning perspective or framework, which will guide the setting of the national development targets, as

well as provide the basis for measuring the level of the country’s achievements, at any particular point in time.

2.3 There has been considerable international consensus developed since the World Population Conference at Bucharest in 1974 and the International Conference on Population at Mexico City in 1984, on the need to consider the broad issues of interrelationships between population, sustained economic growth and sustainable development. The 1994 International Conference on Population and Development built on this consensus, but with a broader mandate on development issues, reflecting the close interconnectedness of population, poverty, patterns of production and consumption, and the environment, underscoring that none of them can be considered in isolation.

2.4 The daily activities of human beings, communities and countries are interrelated with population change, patterns and levels of use of natural resources, the state of the environment, and the pace and the quality of economic and social development. Persistent and widespread poverty, as well as social and gender inequalities, have significant influence on, and are in turn influenced by demographic parameters such as population growth, structure and distribution. Similarly, unsustainable consumption and production patterns contribute to unsustainable use of natural resources, leading to environmental degradation, thus reinforcing social inequities and poverty, which, in turn, have dire consequences for demographic

parameters. This is a vicious circle which demonstrates the interconnectedness of these variables and hence the interrelationships between population, sustained economic growth and sustainable development. It is in the context of the above that this chapter highlights the medium to long-term population and development prospects for Botswana.

2.5 In view of these interrelationships, the recommendations of the 1994 International Conference on Population and Development have advocated for a paradigm shift in planning. This paradigm shift reflects the recognition that population as a factor and a beneficiary of development is central to social and economic planning and therefore must be integrated into the mainstream development planning process. In pursuance of this goal, the Government of Botswana adopted a comprehensive and multi-sectoral National Population Policy in 1997.

2.6 This Policy is guided by a set of principles such as that: *all human beings are born free and equal in dignity and rights ; the right to development is a universal and inalienable right and an integral part of fundamental human rights ; the human person is the central subject of development; human beings are at the centre of concerns for sustainable development ; and that sustainable development as a means to ensure human well-being, equitably shared by all people, today and in the future, requires that the interrelationships between population, resources, the environment and development should be fully recognised, properly managed and brought into harmonious and dynamic balance .*

2.7 It is, therefore, within the framework of this Policy, in tandem with other sectoral policies, such as the National HIV/AIDS Policy, National Health Policy, the Revised National Policy on Education, the National Settlement Policy, etc., that the dynamics of population and development are being investigated to map out the long term prospects. Since the impact of policies and programmes cannot be evaluated realistically within the medium time-frame of the plan, a long-term planning perspective, such as Vision 2016, is necessary.

POPULATION SITUATION AND DEVELOPMENT PROSPECTS

Population Size and Growth

2.8 The population profile presented in this Chapter is based on the 2001 Population and Housing Census. Table 1.1 of Chapter 1 shows that in 2001 the total de-facto population of Botswana was estimated at 1,680,863, compared with 1,326,796 in 1991, an increase of 354,067 over the ten-year period. This represents an average annual growth rate of 2.4 percent compared to annual growth rates of 3.5 percent between 1981 and 1991, and 4.5 percent during the period 1971-1981. The national average annual population growth rate has been declining over the years.

2.9 This is mainly a result of the declining natural rate of increase from 3.4 percent in 1981 to 1.6 percent in 2001. Although there has been a notable decline in the total fertility rate from 6.6 in 1981 to 3.3 in 2001, there is evidence also of increasing mortality rates. The crude death rate rose from 11.5 to 13.5

between 1991 and 2001, reversing the decreasing trend recorded between 1981 and 1991. The increase in the mortality rates has impacted negatively on the life expectancy at birth, which is now estimated at 55.7 years in 2001, a loss of approximately 10 years from 65.3 years in 1991. This is most probably a result of HIV and AIDS. This has far reaching socio-economic policy and programmatic implications for Botswana, in the short to long term.

2.10 The growth rate of the population has not been uniform throughout the country, with district population growth rates varying considerably. The average annual growth rates range from the lowest rate of 0.36 percent in Orapa to the highest rate of 3.57 percent in Chobe¹. Orapa is a closed mining town, which is restricted to mine employees and their families. The population growth rate of this town is a good example that demonstrates how Government policy can impact on the development of any settlement.

2.11 There is a general pattern that is emerging which shows that villages in close proximity to the towns and cities have experienced more growth than elsewhere in the country. For example, the population in villages in the periphery of Gaborone such as Mogoditshane, Gabane, Morope, Mmopane, Metsimotlhabe, and Gaphatshwa has more than doubled, with average annual growth rates between 8.81 percent and 10.89 percent in the inter-censal period. A similar pattern is observed for villages within the periphery of Francistown.. For instance, the population of Tati Siding rose by 6.18 percent while that of

Borolong increased 9.10 percent per annum between 1991 and 2001. Perhaps this is to be expected since such villages usually act as 'dormitory' places to those who work in the two cities, because they either cannot find or cannot afford residential accommodation in the City. This is most likely to be a permanent phenomenon. While there may be nothing wrong with this, this development has important policy implications. While Mogoditshane and Gabane were already classified as urban, the other villages are likely to, in the very near future, depict characteristics similar to towns and cities, such that their demands for services will be urban in character. There is, therefore, a need to look closely at the infrastructural capacity (land servicing, roads, sanitation, etc.) of these villages to offer such services, as well as the capacity of the institutional and administrative structures to cope with such demands. However, apart from growth around the cities, there has been considerable population growth in some parts of north-western Botswana. This might reflect people's responsiveness to the call for diversification and, in particular, to tourism being promoted as a new engine of economic growth.

Population Age Structure and Population Growth Momentum

2.12 Although the national population is growing at a slower rate of 2.4 percent, the continued youthfulness of the population indicates that the population will continue to grow positively for some time to come. This is because the population aged less than 15 years constitutes approximately 36.7 percent of the total population, while the 65 plus is only 5 percent in 2001. This is

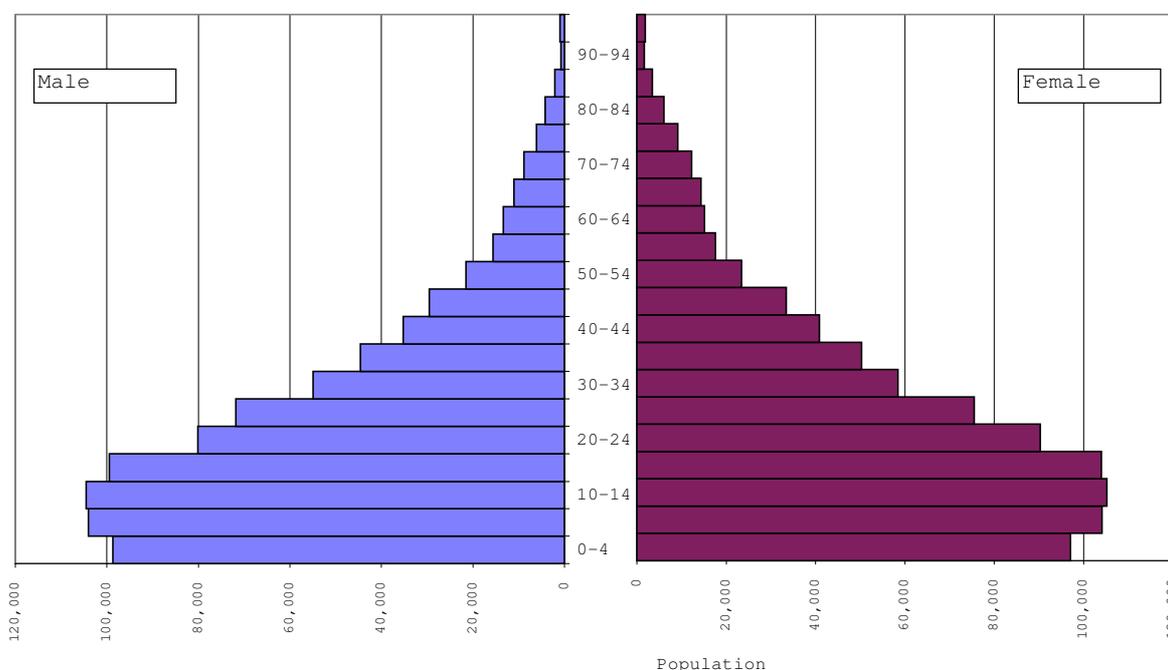
¹ 2001 Preliminary Census

despite the evidence of a decline in the proportion of the under 15-year population age group, from the 1981 and 1991 levels of 47.7 and 43.2 percent, respectively. This is likely to be a consequence of combined effects of the increasing infant and under-five mortality rates due to HIV/AIDS and reduced fertility due to the increase in contraceptive prevalence rates among women in the childbearing ages. Infant mortality was in 2000 estimated at a rate of 57, up from 48 in 1996, under-five mortality at 75, up from 38 in 1996 and childhood mortality at 20 per 1000 live births in 2000, compared to 16 in 1996. The contraceptive prevalence rate was estimated to be 44 percent in 2000 from 42 in 1996.

demographic transition stages, the population of Botswana will continue to grow for some years to come. This is largely because of the large number of young women entering the reproductive age bracket. In 2001, the proportion of young women in the reproductive age group (15-49 years) in the total female population was 52.5 percent. Although the total fertility rate is declining while mortality is increasing, the fertility levels are not falling fast enough. The youthfulness of the population and the persistent high levels of fertility have therefore imparted a strong population momentum. The population can be expected to continue growing for some years in the future, even after its average fertility drops to population replacement levels.

2.13 As it is the case with countries still at the lower end of their

Chart 2.1: Botswana Population Distribution
Population by Age and Sex

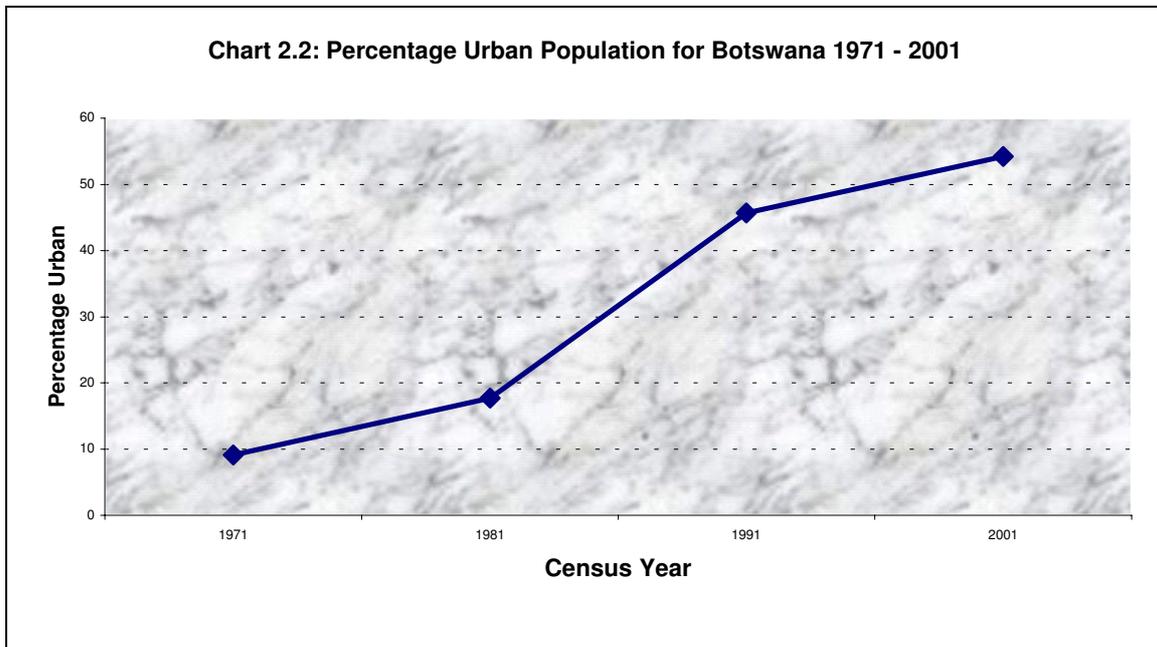


Source: Preliminary Results 2001 Population and Housing Census

2.14 In spite of the growing population and the youthful age structure, there are indications that 'demographic transition' is taking root. Evidence is provided in the increasing mean age of the population that has increased from 23 years in 1991 to 24.5 years in 2001. The reduction of the dependency ratio from 93 in 1991 to 71 in 2001 and the expected further declines provides evidence of this. This is because of reduced number of births and reduced life expectancy.

Urbanisation

2.15 In accordance with the statistical definition of urban areas as, if at least 75 percent of its workforce is engaged in non-agricultural activities and its population is at least 5,000, the population trends point to fast increasing urbanisation in Botswana over the years, perhaps supported by the growing concentration of the population around towns and cities. The Chart and Table below demonstrate the proportion of the urban population since 1971.



Source: National Census 1971, 1981, 1991 and 2001

Table 2.1: Growth of Population in Urban Settlements, 1971- 2001 (^000)

	1971	1981	1991	2001
Gaborone	17.7	59.7	133.5	186.0
Francistown	18.6	31.1	65.2	83.0
Lobatse	11.9	19.0	26.0	29.7
Selebi-Phikwe	4.9	29.5	39.8	49.8
Orapa	1.2	5.2	8.8	9.2
Jwaneng		5.6	11.2	15.2
Palapye		9.6	17.3	26.3
Tlokweng		6.7	12.5	21.1
Mogoditshane			14.2	32.8
Serowe			30.3	42.4
Mahalapye			28.1	39.7
Maun			26.8	43.8
Letlhakane			8.6	15.0
Kasane			4.3	7.6
Ghanzi			5.5	9.9
Sowa			2.2	2.9
Kanye			31.4	40.6
Moshupa			11.4	16.9
Ramotswa			18.7	20.7
Molepolole			36.9	54.6
Thamaga			13.0	18.1
Gabane			6.0	10.4
Mochudi			25.5	37.0
Bobonong			7.7	14.6
Tonota			11.1	15.6
Tutume			10.1	13.7
Mmadinare				10.9
Shoshong				7.5
Tshabong				6.6
Gumare				6.1
Letlhakeng				6.0
Lerala				5.7
Kopong				5.6
Maitengwe				5.3
Total Urban	54.3	166.4	606.3	910.5
Total Population	596.9	941.0	1326.8	1680.9
Urban Pop (%)	9.1	17.7	45.7	54.2

Source: National Census 1971, 1981, 1991 and 2001

2.16 This trend creates additional pressure on the provision and distribution of goods and services such as water, food, electricity, sewerage and housing, and also on opportunities for education, health and employment. It also has policy and programmatic

implications for rural development. While policy interventions or considerations have been biased towards addressing rural-urban migration, it is becoming increasingly clear that there is now another dimension to the concept of urbanisation in Botswana, viz. *the*

transformation of whole settlements from rural to urban status. This change in status has been due to the impact of economic developments on the population, both in these areas and in towns and cities adjacent to them.

Population Distribution and Land

2.17 With a population of 1,680,863 over a fixed land area of 581,730 square kilometres, the average population density has increased from 2 persons in 1991 to 3 persons per square kilometre in 2001. The population densities for Gaborone and Francistown are at least 1,000 persons per square kilometre, as compared to densities well below 1,000 in 1991. These densities depict an important spatial feature in the average growth patterns of the population. While most district population densities have increased during the period 1991-2001, with the exception of the sparsely populated ones, significant changes are evident in the cities and towns. It is worth noting that most of these areas, experiencing rising population densities are in the south-eastern parts of the country, where only 5 percent of the total land is suitable for arable agriculture. Increases in population in these areas will result in more industrial and residential construction, as well as construction of physical infrastructure.

2.18 On the other hand, though districts such as Kgalagadi, Ghanzi, Chobe, Okavango, North East and Central Boteti have experienced positive growth rates, they have on average experienced no change in their population densities limit, a feature that may be indicative of the economic growth potential of these areas.

Sparseness of the population in these areas has serious cost implications for the delivery of various social services, such as education, health and sanitation.

Population and Water Resources

2.19 Water is a scarce commodity in Botswana. This scarcity is exacerbated by the persistent droughts, which are becoming a common feature of the country. The country's limited water supplies are under continual pressure from the still rapidly increasing population, particularly in urban areas, where demand is estimated to have trebled between 1990 and 2000. Increased consumption, in combination with a very limited national recharge rate (3 mm per annum), requires constant sinking of new boreholes, leading to a significant fall in the groundwater table.

2.20 To complement the underground water resources, the Government has during NDP 8 under the North-South Carrier Water Supply Project transferred the water resources from Letsibogo Dam in the north to the greater Gaborone Area, surrounding villages and those along the Gaborone-Lobatse corridor. The country continues to provide the basis for water resource development through the 'National Water Master Plan', which includes the development of Lower Shashe Dam to be completed during this Plan period.

2.21 The National Water Master Plan and related water plans, while being responsive to increases in demand at the national level resulting from population increases, also have to accommodate population shifts due to changing population densities and spatial distribution. Such shifts are

characterised by the increase of the urban population from 45.7 percent in 1991 to 54.2 percent in 2001 and by faster rates of growth in villages around cities and towns. The development of more human settlements has the potential to result in water pollution due to disposal of waste. This creates major challenges for enhanced water management and protection.

2.22 Though the 2001 Census estimates that only 88 percent of all households have access to potable water, there is evidence that some improvements have, however, been made in the provision of potable water nationwide.

2.23 The main constraint has been the declining yields of boreholes induced by persistent droughts and diminishing water sources due to contamination and overloading. This is likely to be exacerbated by the proliferation of settlements, due to the revised National Settlement Policy's reduction of the settlement population threshold from 500 to 250. Water is, indeed, already a major constraint for Botswana's development efforts. This, therefore, calls for continued investigations and assessments on both surface and ground water resources. For these reasons, enhanced water conservation and protection becomes just as critical as improved water management. Government will undertake more technological research to assist in identifying sustainable solutions to these problems and concerns.

Population and Energy Resources

2.24 The importance of energy in the development process for Botswana cannot be overemphasised since it plays a vital role both for households and industry. Vision 2016 points out that *energy is a pre-requisite for successful industrialisation and Botswana must therefore seek to develop cost-effective sources of energy*. The Vision further notes that *Botswana has a tremendous potential for solar energy that must be exploited, especially for rural communities not catered for by the national grid*.

2.25 In 2000, the country's primary energy supply was comprised of 34 percent as coal, 32 percent as petroleum products, 30 percent as fuel-wood, 4 percent as electricity and 2 percent as solar-energy. The Energy Statistics also indicate that, in 2000, the residential sector consumed 42 percent of the energy resources, mainly fuel-wood, followed by transport and the industrial sectors at 27 and 23 percent, respectively.

2.26 According to the 2001 Population Census, there has been a shift in the usage of energy sources for lighting and cooking. In 2001, 25 percent of households, compared to 10 percent in 1991, used electricity, and 59 percent, compared to 64 percent in 1991, used paraffin for lighting. As regards fuel for cooking, the proportion using LPG gas increased to 41.1 percent in 2001, from 21.7 percent in 1991, while the proportion using fuel-wood dropped to 46 percent in 2001, from 64 percent in 1991. In the past, the main source of

energy used by rural households for both cooking and lighting was fuel-wood. Current trends now show that LPG gas and electricity are making inroads as major sources of energy for cooking, without necessarily replacing fuel-wood. Urban households which have relatively higher incomes and better access to most energy sources have a higher connection rate of electricity at 43 percent, compared to 18 percent of rural households. It is estimated that about 80 percent of wood produced in the country is used to produce energy for cooking, heating and lighting and that wood supplies 98 percent of domestic energy to 78 percent of the rural households and 79 per cent of domestic energy to 22 percent of the urban households.

2.27 It is evident from the above statistics that, despite the decrease in the use of fuel-wood from 64 percent in 1991 to 46 percent in 2001, fuel-wood continues to be the primary source of energy for the rural population and possibly the poorer segments of urban population. Yet, the availability of fuel-wood has now reached critical levels in certain areas in eastern Botswana; a part of the country where most of the population is situated and in which, higher population growth rates have been experienced over the recent past. The over-exploitation of this resource is one of the major environmental concerns not only for depletion considerations, but also due to resulting problems of deforestation and land degradation.

2.28 To meet the long-term energy needs of the increasing Botswana population in a sustainable manner, there is an urgent need to enhance efforts for diversifying household energy through new and renewable sources, such as

solar energy, particularly for water heating and power generation. There is, therefore, a need to actively promote research and development in this area, with a view to cutting down the initial capital costs for the solar equipment. Government, through the Botswana Technology Centre, is doing a lot of research in this area of renewable energy sources, including solar energy as an alternative cost-effective energy source. Alongside these efforts, Government continues to intensify its efforts and accelerate the rural electrification programme and explore the feasibility of integrating the grid and the non-grid technologies for rural electrification. The utilisation of coal will also be encouraged, particularly in Government institutions.

Population and the Environment

2.29 All sections of the population depend on the country's natural resources, namely climate, fuel-wood, veld products, wildlife, land, water, air. The loss, through depletion or degradation of these resources, also affects everyone, particularly the poor. The rapid urbanisation of Botswana's population during the past three decades has resulted in increased pressure on and competition for arable land used for food production. This has, in turn, resulted in pollution caused by waste from the extraction of raw materials from the earth, from the consumption of raw materials or products and from the excretion of human waste. In 1998, it was estimated that 270,425 tons of solid waste were disposed of annually in landfill and dumping sites. An additional 34,610 tons of hazardous waste and

liquid waste were also produced². Urban dwellers produce more solid waste than people in rural areas due to their varied consumption patterns.

2.30 Wastewater consists of polluted water from homes, schools, hospitals, industries, offices and shops. It includes sewage from septic tanks and pit-latrines. Such waste can cause pollution of ground water supplies, which also has the potential for endangering the health of people and animals. The amount of wastewater produced in Botswana is increasing rapidly. It is predicted to rise from 117,000 cubic metres per day in 2000 to 287,000 in 2020³. With rapid population increase, in particular, the rapid urbanisation and continued industrialisation, these estimates are likely to increase phenomenally.

2.31 Botswana is highly vulnerable to climate changes due to high levels of greenhouse gases. Fuel-wood, a coal-fired power station, a soda ash plant, a copper-nickel smelter, small amounts of fuels burned for domestic cooking and heating and petroleum products for transport fuel are the main sources of carbon dioxide emissions. In addition, due to population growth, urbanisation and the demand for industrialisation, the energy demand in Botswana is increasing rapidly. The environment affects population change in a variety of ways also. Recurring drought spells have, among other things, induced migration from rural to urban areas in search of productive employment due to loss of opportunities on the land and

other sources of livelihood, such as livestock.

Health

2.32 The increase in numbers of women in the reproductive age group (15-49 years) will continue to create additional demand for health services such as reproductive health, including family planning. Major achievements have been made in this sector. There has been a reduction in total fertility rate from 4.2 in 1991 to 3.3 in 2001. This is attributable to the contraceptive prevalence rate which in 2000 stood at 44 percent for all women, the increased proportion of supervised deliveries at 99 percent; and the expansion of health services and facilities throughout the country, etc. However, the HIV/AIDS pandemic has impacted negatively on some key indicators and reversed some of the achievements from the past. The infant and under-five mortality rates have, respectively increased between 1996 and 2000 from 38 to 57 per 1,000 and from 48 to 75 per 1,000, leading to an overall life expectancy of 55.7 years in 2001, compared to 65.3 years in 1991.

2.33 Teenage pregnancy continues to be one of the major sexual and reproductive health concerns, with 17 percent of teenage girls being mothers and over 85 percent of these being unplanned. This is particularly worrying in this era of high HIV prevalence among young people. The relatively high incidence of teenage pregnancy continues to jeopardise the future of young girls. In 1996, 62.1 percent of teenagers (teenage-girls) were pregnant. Slightly more than 2 percent of the first pregnancies were teenagers below 15 years of age. Teenage pregnancies are

² Botswana: Towards National Prosperity
Common Country Assessment 2001 UN System
for Botswana

³ Botswana: Towards National Prosperity
Common Country Assessment 2001

positively associated with higher morbidity and mortality for both mothers and children. Pregnancy among teenagers also interferes with education prospects and consequently, the potential for productive life. Lower levels of education have been associated with higher poverty levels.

2.34 Adolescents are faced with multiple sexual and reproductive health problems, including HIV/AIDS, unplanned pregnancies and unsafe abortions. Between 1995 and 2000, national sentinel surveys among pregnant women have consistently recorded HIV prevalence of over 20 percent among 15-19 year old adolescents. For every one adolescent boy, there are 4 adolescent girls infected with HIV. Studies also show that over 90 percent of adolescents in Botswana were aware of HIV, although in most instances this knowledge did not result in behavioural change. Access to friendly reproductive health services is limited. However, with the current efforts to reorient the Maternal and Child Health/Family Planning Programme to the Sexual and Reproductive Health Programme, most of these concerns are being addressed.

Education

2.35 A remarkable achievement in education has been the 92 percent primary school enrolment ratio in 2000. Since access is high, focus is now on improving the quality of education. Opportunities for early childhood stimulation and learning are very limited. According to the 2000 Multiple Indicators Survey, only an estimated 9 percent of children have had access to pre-school education. The private sector,

Non-Governmental Organisations and some local authorities provide very limited early childhood care and education. As stipulated in the Revised National Policy on Education, Government limits its participation to creating an enabling environment, monitoring and ensuring standards on early childhood education and care, which is a critical area in which Government continues to take particular interest.

2.36 Government continues to review the entire education system with the aim of improving the quality and the relevance of basic education. Such efforts include the revision of the curriculum for the ten-year Basic Education Programme. These improvements include increasing the practical orientation of the three-year secondary education programme and the infusion of Population-Family Life Education dimensions. The draft Adolescent Sexual and Reproductive Health Programme has been designed in such a way that facts about sexuality and health, including HIV/AIDS, are a part of the examinable school curriculum.

HIV/AIDS

2.37 One of the major challenges facing the country now and over the past two decades is HIV/AIDS. According to the *Botswana 2001 HIV Sero-Prevalence Sentinel Survey* (December 2001) amongst pregnant women and men with sexually transmitted diseases, HIV prevalence rate among pregnant women was 38.8% and 29.8% among the adult (15-49 years) population in 2001. High prevalence rates were reported among the younger age groups,

the most sexually active and productive sectors of the population.

2.38 The impact of HIV/AIDS is now manifested in increased mortality rates and reduced expectation of life as reported earlier in the Chapter. In the year 2000, it was estimated that patients with HIV/AIDS and related conditions occupied more than 50 percent of hospital beds. The increased morbidity and mortality also put considerable pressure on the health system. Most AIDS deaths occur in adults of childbearing age leaving behind orphans dependent on aged grandparents or relatives. There were an estimated 78,000 orphans below the age of 15 years in 2000. If the present trend of the spread of HIV infection continues, children in unprecedented numbers will be left without parental care and traditional caring mechanisms will soon be unable to cope. The number of child headed households will increase significantly and is expected to continue to one in every five children by the year 2010 unless appropriate measures are put in place to contain the situation.

2.39 The 2000 Study on the 'Macro-Economic Impacts of HIV/AIDS in Botswana' by the Botswana Institute for Development Policy Analysis, indicates that HIV/AIDS poses a great threat to continued economic growth in Botswana, mostly because of its impact on the labour force, savings and investment. The study forecasts that AIDS will have the effect of shifting the labour force to a slightly younger generation by about 3 years, thus negatively impacting on work experience, particularly for the skilled labour force. The labour supply will, however, continue to grow, but at a

slower rate. The impact of HIV/AIDS on productivity will always be negative due to lost days due to absenteeism and illness.

2.40 HIV/AIDS can affect the macro-economic performance because there is likely to be a reduction in domestic savings. A reduction in savings is, in turn, likely to lead to an overall fall in investment. Investment may also fall because of loss of profitability, due to higher labour costs or expected fall in the returns to investment. A fall in investment will impact negatively on the rate of growth of the economy. This has far-reaching implications for the Vision 2016 goal of the required investment of 41 percent of GDP, in order to realise an overall economic growth of 8 percent per annum until 2016 that will accommodate a population growth of 2.1 percent. While the average annual population growth rate is likely to reduce further from the 2.4 percent of 2001, the impact of HIV and AIDS on savings and investment is a major threat to the investment target, unless the pandemic is brought under control.

2.41 The Government's response to HIV/AIDS is enshrined in the National HIV/AIDS Policy, and its National HIV/AIDS Strategic Plan for the period 2003-2009. Both documents highlight the multisectoral nature of the response, facilitating the participation of all sector/Ministries, districts and communities, civil society, including people living with HIV/AIDS and the private sector, and international development partners in lowering the incidence and minimizing the impact of HIV/AIDS. During the Plan period, NACA will facilitate and coordinate implementation of various HIV/AIDS

interventions by the different sectors. Efforts will be geared towards taking messages to the people through educational campaigns and provision of HIV/AIDS services. Lessons learned from previous National HIV/AIDS Strategies identify three key areas of focus for the current Strategy. Firstly, there will be coordination of both planning and implementation of HIV/AIDS initiatives across sector/Ministries, districts and civil society. Secondly, HIV/AIDS will be mainstreamed into the national development process. Thirdly, there needs to be an intensified focus at the district level, engaging communities and local stakeholders in the specific issues of relevance to HIV/AIDS, which differ from district to district.

Population and Poverty

2.42 Poverty remains one of the major development challenges for Botswana. The concept of poverty refers to an individual's or a family's inability to achieve minimal standards in fulfilling basic human needs such as food, clothing, shelter, health, education and sanitation services. Poverty therefore presents itself in many different forms. A number of studies worldwide have, however, shown that evidence for the impact of population growth on poverty is strongest at the micro level, that is, at the level of households and communities. It has been found that larger families tend to save less than smaller families of similar socio-economic status.

2.43 On the other hand, the statistical link between population growth rates and overall economic performance has been more difficult to isolate to get

discernible and conclusive patterns. However, there has been a clear and logical link between high population growth rates and lower wages. The greater the supply of labour, the lower the wage rate in the marketplace. There has been plenty of anecdotal evidence that rapid population growth can quickly overburden essential social services such as health, sanitation, water supplies and education. Measures to reduce population growth alone will not, however, solve Botswana's economic problems or, more specifically, do a great deal to reduce poverty in the short-term. But given that a sustained decline in this rate, particularly in total fertility, presents long-term economic opportunities, a well-articulated policy on population growth deserves to be an important component of a broad-based strategy to attack the causes of poverty.

2.44 In 1994, it was estimated that 47 percent of households in Botswana were living below the poverty datum line. The data also indicated that 23 percent of the population lived on less than US\$1 per day. Rural areas were the most affected, with the most widespread and severe poverty found in the western districts of Ghanzi and Kgalagadi. The percentage of the population living below the poverty datum line is estimated to have fallen to 36.7 percent by 2001, according to the consultancy on the formulation of a national poverty reduction strategy. The goal of Vision 2016 is, however, to reduce the proportion of the population living below appropriate poverty datum line to 23 percent by the year 2007 and to zero by the year 2016. The devastating impact of HIV/AIDS is likely to render this goal almost unattainable.

2.45 Although the 2000 Study on the *Macro-Economic Impacts of HIV/AIDS in Botswana* has not been able to provide precise estimates on the magnitude of the impact of HIV/AIDS at the household level, it predicts that in the long-term, with the current prevalence rates, the proportion of households below the Poverty Datum Line will rise by 6 percent, while that of poor individuals will rise by 4 percent. It predicts that the national income dependency ratio will rise from 5.4 to 6.4, that is, “every income earner can on average expect one extra dependant as a result of HIV/AIDS over the next ten years”. Unless the Government continues with HIV/AIDS social programmes, the situation is expected to be worse for the poorest 25 percent of the households, where “every income earner in this category can on average expect an extra 8 dependants as a result of HIV/AIDS”.

2.46 Household resources are being reallocated for assisting AIDS patients. This epidemic is most likely, therefore, to dissipate household incomes which will result in greater levels of poverty in the general population emanating from loss of bread-winners, increased rate of orphanhood, increased costs in health, loss of income earning opportunities due to ill-health, etc. Government has, however, in January 2002, introduced universal access in phases to the Anti-retroviral Therapy, as well as expanded coverage of the Programme on Mother-To-Child Transmission. These measures are likely to mitigate some of these impacts.

CONCLUSIONS AND FUTURE CHALLENGES

2.47 The development challenges facing Botswana are complex. In order for Botswana to significantly improve their standard of living by 2016, the real economic growth rate must be sustainably higher than the population growth rate. This will require, among other things, enhanced productivity of the labour force, through higher investment in education, training, health and sanitation.

2.48 As the economy is structurally changing and modernizing, the demand for land, water and energy is also changing. Increases in the population, coupled with its redistribution, also dictate changes in the nature of demand on natural resources. The environment in terms of these resources also directly or indirectly affects some population changes, e.g., its distribution, etc. In this regard, the question of sustainable resource use becomes an important issue to address. This requires greater understanding of the complex interrelationships between population and development. Government will, therefore, continue to undertake policy-oriented research on the interrelationships between population and development.

2.49 Population cannot be looked at only in terms of numbers and rates. It is both a recipient of development as well as a resource for development. Government will, therefore, continue to expand social infrastructure and improve on the quality of public services. Given the high costs associated with the provision of these services and other priorities such as HIV/AIDS,

Government will continue to explore more sustainable and cost-effective ways for delivery.

2.50 Since land is a non-expandable resource, it is now becoming imperative that ways are identified to increase the productivity of land. There are many competing demands on this scarce resource. Government will, therefore, expedite the implementation of the 'Science and Technology Policy for

Botswana' to come up with more cost effective and environmentally friendly ways to improve the productivity of land in a sustainable manner. The same goes for water and energy.

2.51 In order for Botswana to attain Vision 2016 goals, Government will explore more avenues for development co-operation and cost-sharing with the private sector and communities. This is in concert with the spirit of self-reliance.