Population Growth and the National Vision

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National Vision
Ethiopia’s Vision is to reach the level of middle-income countries where democracy and good governance are maintained, so people’s participation, goodwill, and justice are secured. The vision is to build a prosperous middle-income country by 2020, where growth is led by the agricultural sector.
How does population size affect Ethiopia’s economic growth and social development in the coming decades?
In 1984, Ethiopia’s census counted 40 million people. In 2008, Ethiopia’s Central Statistical Bureau estimated there were about 74 million people—a striking increase of 85 per cent in 23 years.
Ethiopia's Population

74 Million in 2008
40 Million in 1984

Source: 2007 Census Report
Fertility Trends Ethiopia, 1990–2005

In earlier decades, fertility dropped rapidly, from 6.4 children per woman in 1990 to 5.5 in 2000. Since then, fertility has not changed significantly and was estimated at 5.4 children per woman in 2005.
Ethiopian women begin childbearing early. One in four women with primary education or less have begun childbearing.

Trend in Fertility

Source: Ethiopia Demographic and Health Surveys (DHS)
Population and Fertility
Ethiopia, 2005 – 2035

Source: Spectrum
The size of Ethiopia’s population will be largely determined by future fertility levels. The bar chart on the left shows the difference in population between 2010 and 2035 depending upon whether future fertility rates decline rapidly or more slowly to a lower level. If fertility declines slowly, from the current level of 5.4 children per woman to 3.3 children per woman, Ethiopia’s population would grow from 80 million in 2010 to 152 million in 2035—a near doubling in just 25 years, in the period of one generation. Alternatively, if the fertility rate declines rapidly to 2.1 children per woman (replacement level), Ethiopia’s population would grow to 132 million in 2035. While this still represents a 65 per cent increase in population size, the difference of 20 million people is significant.

Note that these projections do not take into account the effects of HIV. Projections considering the impact of HIV were examined but showed only a small difference (data not shown). Despite the deaths associated with AIDS, the population continues to grow because of the large number of people who are already parents or about to enter their childbearing years.
Youth Bulge and a Demographic Bonus

This graph shows the population pyramid for the year 2007 that depicts the distribution of people across age groups, with males to the left and females to the right. A large number of youth constitutes Ethiopia’s population; about 45 per cent of the population is under age 15. This young age structure creates a powerful momentum for future population growth. Many females will soon enter their reproductive years and have children within the next decade.

Ethiopia is moving towards the second phase of a demographic transition, with fertility declining slowly following the drop in infant mortality over the last two decades. Ethiopia has the potential to benefit from a demographic bonus, if it invests in rapid fertility decline in the next two decades. Bonuses from demographic transition come when the working age population grows faster than the total population and when savings at the household level increase because the number of dependents below the age of 15 falls and because public expenditures on social services like education are lowered. This period when the bonus can be captured is only temporary, usually lasting 15-40 years as fertility declines begin. Hence, the time to make the investments in rapid fertility decline is now.
45% of the population is under the age of 15

Age Structure

Ethiopia Population Pyramid, 2007

Every Ethiopian adult supports 0.93 dependents
The Ministry of Education’s vision is “To see all school age children get access to quality primary education by the year 2015 as well as ensure an efficient and cost effective education system producing skilled and qualified human power that could play a leading role in development and building a democratic system.” Education indicators have improved in recent years, with improvements in gender equity in gross and net enrollment in primary school. However, much investment is still needed to improve the quality of the education if Ethiopia is to harness its young population towards achieving continued and rapid economic development.
Education
Fewer students require fewer resources. In 2007, there were 59 primary students to one teacher. Per capita spending on primary education is estimated to be ETB 2.6 Billion. The government aims to reduce this ratio to 50 students per teacher. Even with this improved ratio, fewer resources would be needed if lower fertility is attained because there would be 6 million fewer primary school students to teach by 2035. With lower fertility, 1.2 million fewer teachers will be needed by 2035, and recurrent expenditures on education will be ETB 2.2 Billion less in 2035.
Primary School Expenditures

Fewer Students, Fewer Recurrent Expenditures

Expenditures (ETB Billions)

Fast Scenario

Slow Scenario

Source: Spectrum
Ethiopia’s per capita spending on primary education is estimated to be ETB 2.6 Billion. Even with higher costs from increased family planning services, there would be a net savings in education sector from a rapid fertility decline. Between 2010 and 2035, the government could realise a cumulative cost savings of approximately ETB 20.5 Billion from rapid fertility decline. The graph represents the net savings in educational expenditures: the difference in educational expenditures between the slow and fast scenarios minus the different in FP costs between the two scenarios.

Net Savings of FP in the Education Sector

Cumulative Savings: 20.5 Billion ETB

Source: Spectrum
Economy
Ethiopia has seen rapid economic growth over the past decade, rising from 4 per cent in 2000 to a peak of 11.8 per cent in 2007. In 2009, Ethiopia had the highest GDP growth rate in the sub-Saharan region, with strong growth in the agricultural sector. The worldwide economic downturn has affected Ethiopia’s GDP growth rate over the past couple of years.

The Growth and Transformation Plan 2010–2015 contemplates sustained economic growth at current and higher levels to transform Ethiopia into a middle-income country by 2020.
GDP Growth Rate (Annual%)
While Ethiopia aims to achieve double-digit annual GDP growth rates in the next five years, it also aims to reduce unemployment among the educated. A large population size will affect Ethiopia’s ability to expand the labour force. If GDP growth rates as targeted are achieved, the estimated GDP per capita would quadruple in two decades. Under the high fertility scenario, GDP per capita would be nearly ETB 48,764, whereas it would reach ETB 56,003 under the low fertility scenario.
GDP Per Capita

Source: Ethiopia Ministry of Finance and Economic Development 2009
With rapid population growth, many new jobs must be created each year in order to support the numbers of youth entering the labour force.

If high fertility continues, Ethiopia will need to create 5.4 million more new jobs by 2035. Under the high fertility scenario, annual new job requirements would rise continuously, reaching nearly 2 million in 2035. In contrast, under the low fertility scenario, about 1.4 million new jobs would need to be created in 2035.
New Jobs Required
Few Jobs Needed

5.4 Million Fewer Jobs Required

Source: Spectrum
Agriculture and the Environment

“Agriculture is a mainstay of the Ethiopian economy and currently represents 41% of GDP.”
Population growth will remain a major determinant of demand for major food crops in the future. For example, Ethiopians consumed more than 12.8 million metric tons of cereals in 2007. If consumption was set at World Food Program Requirements of 224 KG per capita for cereals, required consumption of cereals would reach 34 million metric tons for household consumption alone, if high fertility continues, but 30 million metric tons under the low fertility projection.
Cereal Requirements

Population impact on food security

* Assumes consumption per capita stays at WFP minimum annual requirements for per capita consumption of cereals (224 KG).

Source: Spectrum
Land Fragmentation

Rapid population growth poses major challenges to agriculture. With large families, land holdings must be divided among many family members. Within a few generations, the land plots are too small to support a family. Also, small farms are generally less productive than larger ones, resulting in less food security and less food per person.
Rapid population growth often leads to dense settlements that put pressure on the land, forests, and other natural areas as families seek to meet their needs for sustenance. Intensive agricultural production often leads to soil degradation, erosion, and increased salinity that result in lower productivity. While this decline can occur in just a few years, it takes decades to restore land productivity.
People per Cultivated Hectare

Land must support more people under low fertility

The goal of the Ministry of Health through the Health Sector Development Plan is to “improve the health status of the Ethiopian peoples and achieve the Millennium Development Goals (MDGs).”
The mission of the Ministry of Health is “to reduce morbidity, mortality and disability, and improve the health status of the Ethiopian people through providing and regulating a comprehensive package of promotive, preventive, basic curative and rehabilitative health services via a decentralized and democratized health system in collaboration with all stakeholders.”

Source: HSDP IV draft 2010-2015
Recurrent Health Expenditures
Savings with Slower Population Growth

Source:
Doctors Required

Less Pressure on Health Providers

Source:

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In order to improve coverage of health services the ratio of doctors to population is expected to be reduced by half by 2035 from 1: 40,920 in 2007 to 20,000 by 2035. In order to achieve this goal, Ethiopia would need to quadruple the number of doctors by 2035 under the high fertility scenario. By contrast, with low fertility, the required number of doctors would rise more gradually, thereby increasing the prospects for making health care available to more people.
Net Savings of FP in the Health Sector

Cost Savings of FP and Health

Cumulative Savings: 12.3 Billion ETB

Source: Spectrum
In 2007, the Government of Ethiopia spent ETB 15.5 on health services per person. By 2015, the Ministry of Health would like to double health expenditures. Assuming a shift to higher expenditure of ETB 100 per person by 2035, Ethiopia would have to increase annual health expenditures from ETB 1.2 billion in 2007 to ETB 15.2 billion in 2035 if fertility remains high. If fertility were to decline faster, health expenditures would be lower. With lower fertility, the government would realise cumulative savings of nearly ETB 2 billion during the time frame of the projections.
Unmet Need for Family Planning

Family planning is the primary way to lower population growth. One in three married women express a desire to space or limit births but are not using any form of family planning. As a result, almost half of all births are unintended or arrive too soon. These women indicate an unmet need for family planning. If they were able to meet their reproductive desires, fertility would decline and births would be spaced at longer intervals, benefiting both the mother and child.
Family Planning
Call to Action

Rapid population growth contributes to poverty and deprivation, especially in areas where there is competition for resources such as land, water, and employment. Increased competition for these resources often leads to social and economic instability and inequality.

Decisions made now can influence the population growth rate. Investing in reducing unmet need for family planning, reducing early marriage rates, and increasing girls education can help mitigate the impact of population growth on the economy, health outcomes, the environment, and social and economic stability. Achieving the long-term goals of the country will call for contained population growth through crucial investments in family planning and girls’ education.
Unmet Need for Family Planning and the Plan for Growth and Transformation
To realize its vision of becoming a globally competitive and prosperous middle-income nation in 20 years, Ethiopia will need to address the issue of rapid population growth. Wider use of family planning, especially modern contraceptive methods, will result in lower overall fertility and thus a lower rate of population growth. Improving access to and use of high-quality, affordable family planning services will help to satisfy unmet need, resulting in lower fertility and a lower rate of population growth, thereby contributing to social and economic development and achievement of the national vision.
The public, private, and NGO sectors all have a role to play to reduce unmet need for family planning through:

- Integrating population factors in development planning
- Increasing investments in girls education
- Reducing the proportion of early marriages
- Increasing government expenditures in population programs including family planning
- Ensuring availability of family planning commodities
- Improving information, education, and communication around family planning, girls’ education and harmful effects of early marriage

Conclusion
Ethiopia

RAPID Population and Development
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