Key Points:

- Population dynamics, including fertility levels, population growth and density, ageing, migration and urbanisation, influence and are influenced by poverty.

- Fertility levels are strongly influenced by women’s levels of education and empowerment.

- Rapid population growth in countries with low levels of economic development places great strain on public services and dramatically reduces the capacity of governments to meet basic needs.

- High fertility levels in the least developed countries is undermining development and is associated with high levels of poverty, poor health outcomes, environmental degradation, food insecurity, conflict and instability.

- Population growth and density is putting extreme pressure on the natural environment in many developing countries, and heightening vulnerability to climate change.

- Family planning programmes are proven to be highly cost-effective means of improving health outcomes and achieving development goals, and should be fully integrated into poverty reduction and environmental sustainability strategies.

Introduction

Population dynamics are linked to key determinants of poverty including health, nutrition, education, gender, and significantly, economic development. Over the past few decades, rapid population growth has been associated with high levels of poverty. Countries with rapid population growth tend to have the highest incidence of poverty and lowest levels of human development. With the exception of a few oil-rich states, no country has pulled itself out of poverty without reducing population growth. As high birth rates are maintained and populations grow, pressure on national resources and social services increases. In poor countries where resources are already limited, unsustainable population growth diminishes access to and quality of basic health care, education and sanitation and hinders development. Within large households, income must be spread amongst several members, limiting funds for basic services, human capital development (particularly for girls and women) as well as monetary savings.

For those countries experiencing the steepest population growth today, lack of development and poverty are already major concerns that such growth exacerbates. In most countries in the West African Sahel, the absolute number of poor people has increased since the mid-1990s, despite economic

growth. Merely to maintain development standards, population growth in this region demands drastic increases in economic growth, agricultural yields, basic services, water management, the supply of teachers and health practitioners.\(^3,4\) Yet, the availability and supply of such professionals, natural resources and services are already insufficient.

In addition to rapid population growth, other population dynamics, including migration, ageing and urbanisation, influence and are influenced by poverty. The link between family planning programmes and poverty reduction, specifically, is such that success in one area consistently generates positive results in the other.\(^5\) However, poverty alleviation policies rarely address population dynamics or family planning. In the past two decades, family planning programmes have been neglected as a health priority, while HIV/AIDS, among other major diseases such as malaria and tuberculosis, has dominated the international health agenda.\(^6,7,8,9\)

While neglected, the innovation of family planning represents a considerable success story in international development. Family planning offers an efficient means of reducing fertility, and a highly cost-effective investment, given the savings it brings for other development goals. Through preventing unplanned pregnancies, family planning reduces necessary expenditure on social services and medical costs, and reduces the need for abortion. In addition to contributing to human development and poverty reduction, family planning responds to the unmet need for planning and spacing births and to women’s empowerment. Access to reproductive health services is a human right, to which commitment was expressed at the UN International Conference on Population and Development in Cairo in 1994. Additionally, universal access to reproductive health is a target in the Millennium Development Goals (MDGs), yet considerable investment and effort will be needed if this objective is to be reached by 2015 (Target 5b: universal access to reproductive health care).

**Box 1: Family Planning: Components of Success**

- Provision of family planning effectively enables women to exercise choice and control over fertility matters, and has contributed to significant improvements in reproductive health and effectively facilitated the decline of fertility levels.
- Between 1965 and 2005, the proportion of women of reproductive age using family planning services in the developing world (excluding China) increased from less than 10% to 53% although


this still falls far short of demand for family planning and masks important differences in uptake levels between and within countries.  

- The increased use of family planning and decline in fertility has occurred in very different political, socioeconomic, cultural and religious contexts. Iran, to take one example, has experienced the largest and fastest decline in fertility. Acknowledging that the growing population was putting pressure on social services and natural resources, the Iranian government invested significantly in reproductive health and family planning services. In just 22 years this non-coercive programme succeeded in reducing the total fertility rate (TRF) from 6.6 in the mid-1980s to 1.8 by the mid-2000s. Regrettably it appears that this policy has recently been reversed, but the potential for rapid effective impact of well designed family planning programmes is well proven by this example.

- Family planning programmes have been most successful when significant progress has been made in other key areas related to poverty and human development, namely education, healthcare and women’s empowerment.

Key facts and figures

Poverty is generally understood in monetary terms on the one hand, and in the ability to meet basic needs such as access to food, water, housing, sanitation and health care on the other. Population dynamics have considerable bearing on these key determinants of poverty.

Box 2: Key facts on Poverty and Population Dynamics

- Countries with high levels of poverty tend to have rapidly growing populations and high fertility rates.

- Countries with high population growth rates tend to have low rates of per capita GDP growth (e.g. Swaziland), and countries with lower population growth tend to have high per capita GDP growth (e.g. Botswana).

- Across countries and within them, contraceptive use is lowest amongst the poorest sections of the population. In 2007 it was estimated that of the 721 million women worldwide of reproductive age that were married or in a union, 63% were using contraception. While this figure is estimated to be 60% in less developed countries as a whole, there are major disparities. The figure is lowest in Sub-Saharan Africa, where only 21% of women married or in a union use a form of contraception, and in many countries in this region this figure is well below 20%. The average unmet need across this region is 24%, but is higher in many countries, with the highest unmet need in Uganda, at 41%.

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14 Ibid.
• Choosing whether to have children, how many and when is a human right and achieving universal access to reproductive health services is a MDG target (target 5b).

• In countries where girls have higher access to education, fertility levels and child mortality are lower.

• Rapid population growth contributes to increased social inequalities and undermines poverty alleviation.15

• As household size decreases, so does household poverty. The smaller number of dependents increases income, savings and educational and economic opportunities, particularly for women.

Poverty, Food Security and Economic Well-being

Seven of the eight Millennium Development Goals (MDGs) are directly related to population16 (though without direct reference to the actual word) and the first, to “eradicate extreme poverty and hunger”, embodies a crucial connection with population size and growth. The definition of suffering extreme poverty is living on less than 1 USD a day, and MDG target 1a is to halve the proportion of those living in extreme poverty by 2015. While significant progress has been made, this success is largely confined to Asia. Very modest improvement has been made in Sub-Saharan Africa and South Asia, where extreme poverty is the most widespread and population growth is the highest17. In numerous countries in Sub-Saharan Africa the relative proportion of poor people is decreasing, yet the absolute number of poor people is growing as the population does. This demonstrates the urgent need for development of a comprehensive policy which integrates poverty reduction with addressing population growth.

Rapid population growth and increasing demands on agriculture challenge food security and efforts to fight hunger in many countries. The consequences are especially dramatic in the poorest countries where the combination of rapidly growing populations and poverty mean that food shortages, and malnutrition, as well as outright famine, are common. Additionally, high food prices in recent years are expected to push another 100 million people into poverty and deepen poverty for the most deprived.18 Without addressing population size and growth in the poorest countries, famine and food security become increasingly difficult to tackle and inhibit progress beyond immediate survival needs.

18 Ibid.
Box 3: Case Study: Niger - Population growth, food crises and poverty

Niger is one of the poorest countries in the world, with the lowest registered Human Development Index (HDI) of 0.340. Life expectancy is 50.8 years, adult literacy (above 15 years) is 28.7% and Gross Domestic Product (GDP) per capita is 627 US Dollars at Purchasing Price Parity (PPP). All of these indicators are among the lowest five in the world, and Niger’s Human Poverty Index (HPI-1) is second to last.

According to the United Nations population database, Niger had one of the highest total fertility rates (TFR) for the period 2005-2010, with women having an average of 7.4 children in their lifetime. The population is very young with 49% of the population below the age of 15. The population is growing at a rate of 3.86%, meaning that the total will double before 2030.

Mortality rates, although decreasing, are still extremely high, especially infant, child and maternal mortality. The infant mortality rate (IMR) was 88.2 per 1,000 live births for the period 2005-2010, and the under-five mortality rate was much higher at 172 deaths per 1,000. For maternal mortality, according to data for the year 2000, 1600 women per 100,000 die due to pregnancy or childbirth. There is therefore an urgent need for improvements in reproductive health care and family planning provision.

Famine, malnutrition, food insecurity and inadequate sources of drinking water are widespread problems in Niger, and are exacerbated by population pressures. Malnutrition in Niger has increased since the early 1990s. During the period 2003-2008, 36% of children under the age of five were underweight and 44% suffered from chronic malnutrition.

The relationship between population growth, agriculture and the environment is clearly exemplified by Niger. Imbalances among these factors have significantly aggravated poverty and resulted in food insecurity, malnutrition and expanding desertification. Much of Niger’s development aid is composed of food aid and funding for malnutrition programmes. The limited availability of water is one of the most visible consequences of population pressures and of immediate concern for both the health and livelihood of the population in Niger, as most of the population is active in the primary sector. The tensions between population, environment and agriculture therefore pose a considerable challenge for economic development and poverty alleviation.

21 Ibid.
Economic Development

The relationship between household size and poverty, as mentioned previously, is that large households are associated with higher levels of poverty since income must be spread across many members, most of whom are dependents (children and/or older adults). In countries with rapid population growth, the age structure is disproportionately young, with a large proportion of the population made up of dependents under the age of 15, relying on those of working age and requiring a large share of the available resources. This constricts income and economic opportunities at the household and societal level, inhibiting economic growth.26

Countries with a large proportion of the population of working and saving age can enhance income growth as a result of capital accumulation. Less income is spent on dependents because a large share of the population is economically active. Known as the “demographic dividend”, this can fuel economic growth if supported by effective policies.27 With demographic transition underway in many developing countries, policies should aim to capitalise on and accelerate transition towards the demographic dividend.

Experiences of demographic transition have varied across regions, with some countries having greatly maximised benefits from declining fertility rates while others have not made such significant gains. South Korea and Singapore have demonstrated that the demographic dividend can support high levels of economic growth, which is believed to have accounted for between one-fourth to two-fifths of the average annual 6% real per capita income growth in East Asia between 1965 and 1990.28

To create adequate circumstances that enable a country to catalyse demographic transition and benefit from the “demographic dividend”, effective policies must also be in place in other strategic fields. Initially, advances in health care are important as they support decreasing mortality rates, declining fertility levels and ensure a healthier workforce. A crucial means of accelerating demographic transition is investment in effective family planning programmes, which enhance economic gains and “lift nations out of a cycle of poverty”.29 Other important areas include education, women’s empowerment, the labour market, standards of governance and the policy setting.

Health, education and human development

The connections between poverty and health have been extensively researched. Health outcomes are poorest among the most socially disadvantaged sectors of the population, exacerbated by poverty. Sexual and reproductive health is an important part of this equation. Poor reproductive health resulting from early pregnancies, maternal morbidity and unplanned/poorly-spaced pregnancies has a negative impact upon women’s overall health.30 When a woman is in poor health there are also effects upon the

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27 Ibid.
28 Ibid.
29 Ibid.
household, including education levels for children, nutrition, child health and overall well-being. Investment in family planning therefore brings improvements to sexual and reproductive health as well as to overall health and well-being, at the same time as reducing financial costs at the household level and for the healthcare system.

An abundance of evidence exists which demonstrates the correlation between education and fertility. Higher levels of women’s education has been shown to reduce infant mortality levels as well as lower fertility by resulting in fewer and better spaced pregnancies. Having higher levels of education and fewer children also permits greater participation of women in the workforce, thereby increasing women’s ability to generate income and reduce the incidence of female poverty. This can contribute to poverty alleviation at the household level as well as bringing benefits to the wider economy. More fundamentally, education and increased economic independence is a source of empowerment, increasing women’s ability to exercise choice regarding their fertility and presenting more life opportunities.

Health and education are of key relevance to population and poverty issues, and illustrate the extent to which population growth is tied to human development. There is extensive debate regarding the exact relationship between fertility levels and economic development, mostly focusing on the sequencing of economic development and fertility decline. Some economists argue that declines in fertility are a result of economic development while others argue that fertility decline will facilitate development. What has been conclusively demonstrated is that progress in one area will positively influence the other.

Migration and urbanisation

Migration to urban areas in less developed countries is a significant population dynamic, and one that is linked to population growth and poverty. Urbanisation is occurring at an unprecedented speed and is especially marked in less developed countries. The exodus from rural areas is generally understood as a reflection of uncertain and insufficient economic prospects, a phenomenon often referred to as the ‘agricultural squeeze’.

A major push factor that has led to this rural-urban population movement has been the decreasing availability and quality of land brought about by population growth. Today, in countries where population growth is highest, there is a negative cycle of over-use of arable land, land degradation, low agricultural productivity, rural poverty and mass migration to urban centres.

With capital and employment concentrated in urban centres, rural populations, and particularly young men, tend to seek opportunities in urban areas. As a result, high population density and overcrowding, underemployment, insufficient housing, poor sanitation and the expansion of slums tend to

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31 Ibid.
34 Ibid
characterise the rapid and unplanned urbanisation in less developed countries.  

**Environment and climate change**

Population dynamics, and particularly high rates of population growth and density, are putting considerable pressures on the natural environment in many countries of the global South, presenting considerable challenges for development. Overexploitation of resources, deforestation, desertification, soil erosion and the destruction of biodiversity are common in countries with rapidly growing populations and high population density. This is resulting in a lack of sufficient natural resources, including agricultural land and water supplies, undermining livelihoods, food security, stability and overall development.

Of particular concern is the complex relationship between population growth and climate change. The negative cycle of population pressures, environmental degradation and poverty is in many countries of the global South being exacerbated by climate change. The impacts of climate change, with the resultant rising sea-levels, increasingly unpredictable rainfall, severe droughts and flooding, are having severe and wide-ranging impacts that are exacerbating poverty. Population growth, by placing increased pressure on resources and inducing migration to more fragile environments, increases vulnerability to climate change, and makes adaptation more difficult. Yet at the same time it is critical to acknowledge that it is not population growth in the global South that is causing climate change. The relatively high level of carbon emissions in the developed world is the key driver of climate change, yet the impacts are greatest in the least developed countries of the global South, despite their historically low carbon emission levels.

In areas where environmental stability is jeopardised by population pressures, integrated population, health and environment projects that include family planning projects can be successful in limiting environmental degradation and reducing poverty. Family planning programmes could therefore also prove a successful, cost-effective approach to minimising the impacts of climate change in the developing world. Countries which are characterised by rapid population growth and high vulnerability to climate change should therefore be supported to integrate voluntary family planning into climate change adaptation programmes.

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Box 4: Case Study: The Philippines – Population growth, urbanisation and environmental degradation

With the highest population growth rate in Southeast Asia, estimated at 1.82% during 2005-2010, and one of the world’s fastest urbanising countries, the enormous pressure on natural resources and the environment in the Philippines poses a considerable challenge to developmental progress.

While there is high population growth across the entire country, economic growth in the Philippines is concentrated in certain urban centres. Approximately one in four households lives below the poverty line and socioeconomic inequality is growing. Rapid urbanisation is resulting in overcrowding, water and air pollution which pose distinct health risks.

Intensifying population pressures are resulting in significant environmental degradation, including the impacts of deforestation. Forests are being cleared at a rapid rate for human activity and there is over-use of arable land and further depletion of natural resources. Biodiversity is threatened as various animal species together with rainforest and coastal reef habitats are vanishing.

This environmental degradation has marked implications for the population as agricultural productivity decreases, availability of food and water is less predictable and environmental sustainability is compromised. It also aggravates the country’s vulnerability to natural disasters. Climate change is likely to intensify this vulnerability by making the occurrence of disasters, such as drought and flooding, more severe and unpredictable. According to the Population Reference Bureau, the danger from exposure to natural disasters is extreme with 35 million people afflicted between 1990 and 2000.

Where implemented, however, those projects linking population and the environment in the Philippines (particularly the coastal areas) have had positive results. Family planning in some areas has brought reductions in household size and the spacing of pregnancies. Notable gains have been made for the environment as well as for poverty reduction and health. More income has become available at the household level, more women are able to join the workforce, and improved reproductive health has reduced medical costs.

Fragile states

Insecurity and civil conflict in many countries of the global South is a key driver of poverty, with one in three of the poor in the world live in fragile states, where achieving the Millennium Development Goals

47 Ibid.
49 Ibid.
50 Ibid.
(MDGs) is extremely unlikely. There is no single definition of what constitutes a ‘fragile state’ but the UK’s Department for International Development’s identifies fragile states as those “where the government cannot or will not deliver core functions to its people”. Population dynamics can contribute significantly to instability state fragility. The most fragile states in the world face considerable demographic pressures and tend to have higher fertility and population growth rates than the overall average for less developed countries. High rates of population growth can contribute to civil conflict where they involve pressure on resources such as land or water, poverty and social inequalities, mass migration and high unemployment and discontent amongst youth. Environmental scarcity, combined with population growth is a frequent contributor to conflict by fuelling competition for resources such as land and water. In many fragile states, as is particularly evident in sub-Saharan Africa, the impacts of climate change are heightening conflict related to population and environmental pressures and undermining development.

Key Policy Recommendations:

- **An Integrated Policy Approach**: Population dynamics, and particularly population growth, should be integrated into poverty reduction strategies. Integrated development approaches that encompass family planning, reproductive health and environmental programmes have been successful in alleviating poverty and promoting environmental sustainability. Donor governments and agencies should promote these strategies though increased funding and support for developing countries to adopt them.

- **Improved Funding for Family Planning**: Increased funding is required for high quality, comprehensive and rights-based family planning programmes. This is known to be a highly cost effective strategy for improving health outcomes and alleviating poverty, by preventing unplanned pregnancies and reducing the necessary investment required in public services. The need for increased access to family planning is particularly urgent in Sub-Saharan Africa, where contraceptive prevalence is extremely low and population pressures are severe.

- **Universal Access to Reproductive Health**: Access to reproductive health care is a human right and Millennium Development Goal objective. Investing in provision of holistic sexual and reproductive health services, across the continuum of care to encompass sexual, maternal and infant health,

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53 Ibid.


would maximise effectiveness of family planning, improve health outcomes and have other far-reaching benefits.\textsuperscript{58}

- **Improved Education and Women’s Empowerment:** Increased investment in education should be prioritised in countries with high poverty and fertility levels. Increasing women’s access to education is a powerful instrument for reducing fertility levels, poverty reduction and women’s empowerment. Women with higher educational attainment have higher levels of contraceptive use and fewer and better-spaced pregnancies, are more active in the workforce and are less vulnerable to poverty.\textsuperscript{59}

- **Environment:** Population issues must be effectively integrated into environmental policy, since population and environmental concerns are inextricably linked. Sustainable management of natural resources requires consideration of population growth, density and movements. Integrated population, reproductive health and environment projects can contribute to poverty alleviation and sustainable development.\textsuperscript{60}

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