Demographic Vulnerability: Where Population Growth Poses the Greatest Challenges

The world is undergoing a demographic transition from high mortality and high fertility to low mortality and low fertility. In many parts of the world that transition is well underway. In Europe, North America and in much of Latin America and East Asia, mortality rates have fallen dramatically and fertility rates have fallen to, or below, the "replacement rate" needed to stabilize population. Population is starting to decline in countries such as Germany and Japan. On the other side of the global "demographic divide," mortality and fertility rates remain relatively high, but mortality rates have fallen faster. As a consequence, population is rising, and in some cases, rapidly. At current rates of growth, nearly 40 countries could double their populations during the next 35 years.¹

World population is projected to increase from 7.3 billion today to 9.6 billion or more by 2050. Virtually all that growth will be in the developing world, and much of that increase will occur in countries already struggling to alleviate hunger and severe poverty. Many countries with rapidly growing populations are threatened by water scarcity or deforestation; others are struggling with conflict or political instability. While progress is not precluded, rapid population growth for these countries is a challenge multiplier. Their populations are *demographically vulnerable* and more likely to suffer from hunger, poverty, water scarcity, environmental degradation and political turmoil.

The challenges associated with rapid population growth

Population growth poses a broad array of challenges for developing countries, but the areas of greatest concern are:



HUNGER AND MALNUTRITION

While significant progress has been made in reducing global hunger, most of the progress has occurred in countries with relatively low fertility. Where fertility rates remain high, the battle against hunger has yet to be won. In some areas of sub-Saharan Africa, the number of malnourished children is actually on the rise, as is population. The population of **Burundi**, which sits atop IFPRI's Global Hunger Index (GHI), is projected to increase by 154 percent by 2050. The population of **South Sudan**, ranked fifth, is projected to rise by 236 percent.



POVERTY

The world has made commendable progress in reducing severe poverty, particularly in the emerging economies, but progress is slow in countries where population growth rates remain high. The population of **Niger**, which ranks first in UNDP's Multidimensional Poverty Index, is projected to increase by 274 percent during the next 35 years. The population of **Mali**, ranked fourth, is expected to increase by 187 percent. Decreases in fertility,

particularly in East Asia, have propelled economic growth by improving health, boosting educational attainment and lowering dependency rates. Economists refer to this as the "demographic dividend." But for countries on the other side of the demographic divide, where population growth rates remain high, demographic trends are helping to perpetuate poverty.



WATER SCARCITY

Some developing countries have ample supplies of fresh water, but many do not. In many countries water tables are falling and lakes are shrinking. The UN warns that the world could be facing a "40 percent global water deficit" by 2030. The population of **Yemen**, one of the most water-stressed nations in the world, is projected to increase by 49 percent by 2050. The populations of **Pakistan** and **Afghanistan**, also very water stressed, are projected to increase by approximately 80 percent. Each of these countries is currently using more than 80 percent of their annual renewable water supplies. While water conservation measures may help, projected population growth in these countries appears unsustainable.





ENVIRONMENTAL DEGRADATION

Population growth also can put unsustainable pressure on soil, timber and other renewable resources. While deforestation can be driven by global resource demands, domestic demand for timber and fuel also contributes to loss of forest cover. The population of **Haiti**, which has already lost 98 percent of its forest cover, is projected to increase by more than half by 2050. The Global Footprint Network estimates **Iraq**, which is projected to increase its population by more than 125 percent by 2050, is overusing its renewable resource base by more than 500 percent. **Uganda**, which is currently consuming renewable resources at twice the natural replenishment rate, is projected to increase its population by 168 percent during the next 35 years.



CONFLICT AND POLITICAL INSTABILITY

Population dynamics can be destabilizing. Governments unable to keep up with the demands of a growing population can lose legitimacy. If there are not enough jobs available, countries with a disproportionately large number of young people (often referred to as a "youth bulge"), face a heightened risk of protests and even conflict. Rapid population growth can also undermine political reconciliation. Almost without exception, countries commonly labeled as "fragile" or "failing" states are experiencing rapid population growth. **Somalia**'s population is projected to increase by 151 percent during the next 35 years. The population of the **Democratic Republic of Congo** (DRC) could rise by 172 percent.

Other factors affect demographic vulnerability

Various factors can ameliorate or exacerbate the challenges associated with rapid population growth. On the positive side, countries with a surplus of land or an abundance of metal and mineral resources are better

able to accommodate the needs of a growing population. Strong public institutions, an educated workforce or a reliable source of foreign assistance can also help. On the other hand, a variety of factors can increase demographic vulnerability. Regional conflict, corruption, climatic changes, economic disparities or gender inequality can make countries less capable of meeting the needs of a growing population.

Reducing demographic vulnerability

Demography is not destiny; demographic trends are not written in stone. Even small changes in fertility trends can alter the population trajectory. There are an estimated 225 million women in the developing world who want to avoid a pregnancy but are not using a modern method of contraception. Millions more need access to more reliable or longer acting methods of birth control. Meeting these contraceptive needs would cost an additional \$5.3 billion annually,² a small price to pay for the multitude of benefits that would flow from improving access to contraceptives. But the immediate or proximate barrier to contraceptive use for most women is not physical access to contraceptives; it is factors such as male opposition, religious prohibition or misinformation about the side effects of various contraceptives methods. Unless those cultural and informational barriers are addressed along with increased access, many girls and women in developing countries will never be able to determine, for themselves, the number, timing and spacing of their births.

While family planning can reduce demographic vulnerability, developing countries also require other forms of assistance, including investments in sustainable agriculture, water conversation, habitat preservation and reforestation that can boost food security, preserve biophysical resources and increase resilience to climate change, conflict and other threats. Without such added investments, many countries will likely lose ground in the race against hunger and severe poverty.

For countries already struggling with hunger, severe poverty, water scarcity, environmental degradation and political instability, rapid population growth is a challenge multiplier. In many cases, the challenges are formidable. Unless more is done to advance gender equity, promote family planning, conserve water, boost sustainable agriculture and improve governance, these countries face an uphill struggle. The challenges are not insurmountable, but we must act with greater urgency.

² Adding It Up: The Costs and Benefits of Investing in Sexual and Reproductive Health 2014, New York: Guttmacher Institute, 2014.



¹ The projected population increases cited in this report are derived from the Population Reference Bureau's 2014 World Population Data Sheet

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COUNTRY RANKINGS

COUNTRY	RANK	ESTIMATED POPULATION 2014 (MILLION)*	PROJECTED POPULATION 2050 (MILLION)*	LEVEL OF VULNERABILITY				
				HUNGER	POVERTY	WATER	ENVIRONMENT	INSTABILITY
South Sudan	1	11.7	39.3	Severe	Severe	Low	NA	Severe
Somalia	2	10.8	27.1	High	Severe	Low	High	Severe
Niger	3	18.2	68	Severe	Severe	Low	Severe	Severe
Burundi	4	10.5	26.7	Severe	Severe	Low	Severe	Severe
Eritrea	5	6.5	14.3	Severe	Severe	High	Moderate	Severe
Chad	6	13.3	37.4	Severe	Severe	Moderate	Moderate	Severe
Democratic Republic of Congo	7	71.2	193.6	High	Severe	Low	Low	Severe
Afghanistan	8	31.3	56.5	Severe	High	Severe	Severe	Severe
Yemen	9	26	38.8	Severe	High	Severe	Severe	Severe
Sudan	10	38.8	77.1	Severe	Severe	Low	NA	Severe
Uganda	11	38.8	104.1	High	Severe	Low	Severe	Severe
Ethiopia	12	95.9	165.1	Severe	Severe	Low	Severe	Severe
Iraq	13	35.1	80.5	High	Moderate	High	Severe	Severe
Zambia	14	15.1	49.2	Severe	Severe	Low	Moderate	High
Burkina Faso	15	17.9	46.6	Severe	Severe	Low	Severe	High
Malawi	16	16.8	41.2	High	Severe	Low	Severe	High
Nigeria	17	177.5	396.5	High	High	Low	Severe	Severe
Mali	18	15.9	45.6	High	Severe	Low	High	High
Mozambique	19	25.1	63.5	Severe	Severe	Low	Moderate	High
Haiti	20	10.8	16.8	Severe	High	Moderate	Severe	Severe

^{*}Population Reference Bureau, World Population Data Sheet 2014, 2014, http://www.prb.org/pdf14/2014-world-population-data-sheet_eng.pdf

