

The missing link in sustainable development: A call to integrate population in the water, food, energy nexus

On 11-12 January, the World Economic Forum's Network of Global Agenda Councils and the United Nations Population Fund (UNFPA) convened a group of leading experts and practitioners representing the private sector, international organisations, civil society and academia to explore the linkages between population and water, energy and food security. The group calls for effectively integrating population and demographics in international policies for sustainable development:

"We reaffirm the global commitment to poverty reduction and sustainability, and emphasize that we will not reach these objectives without addressing the nexus between water, food, energy and population dynamics; governments, the private sector and civil society need to take population dynamics into consideration."¹



Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.



Rio Declaration, Principle 1

Population – an overarching issue

By 2050, the world's population will reach 8-11 billion. In addition to this population growth, billions of people will continue to migrate from rural to urban areas; more than half of the world population already lives in cities. These demographic changes influence every aspect of the world's development. As a result, there is an overwhelming need to rethink the development equation and to further incorporate the population issue into global debates.

In an era defined by severe challenges to achieving water, food and energy security, understanding how population growth and rapid urbanization impact health, growth and resource scarcity is of critical importance. Understanding these linkages provides opportunities to reinvent how people and communities can thrive sustainably. Globally, the most pressing challenges and far-reaching decisions – from poverty reduction to business investment – hinge on understanding the world's demographic trends and their consequences.

Today, one out of seven people continue to live in extreme poverty and suffer undernutrition. Combating poverty and raising living standards of a growing population depends on a favourable structural change and rising productivity, as well as full and decent employment in the agricultural, industrial and services sector.

With land, water and energy emerging as major constraints to future economic growth and social progress, failure to promote more sustainable patterns of consumption and production will significantly increase pressures on all natural resources. These vulnerabilities are most pronounced in the world's least developed countries, which have the highest poverty and population growth rates, the weakest production and governance

capacities, and already face significant water, energy, food and infrastructure shortages.

The vulnerabilities are most pronounced in the world's least developed countries. They have not highest population growth rates and poverty incidence, the weakest production and governance capacities, and they are already roiled by fierce water, energy, food and infrastructure shortages.

According to the World Economic Forum's latest edition of the Global Risk Report, current global population trends are a key and systemic risk to sustainable development and economic growth. Addressing the challenges requires a dual response:

1. The public and private sectors must switch to new, resource-efficient consumption and production patterns that focus on the water-energy-food-climate intersections — and their link to population trends. Appropriate public policies, public-private partnerships, and new business models can achieve the necessary technological innovation, investment and policy change.
2. The transition to a "green economy" must be complemented by policies that address population dynamics and encourage favourable demographic transitions. Future demographic trends are not destiny. Whether the world population is more likely to grow to 11 billion or to 9 billion by mid-century (see graph) depends on today's policies: Investment in human capital, access to reproductive health and education will contribute to the empowerment of young women and will allow them to make informed choices about their families and future, and they will reduce fertility and population growth.

Risks of inaction

Failure by government, business and civil society to address population dynamics in their efforts to promote sustainable development will

- Threaten water, food and energy security;
- Jeopardize economic growth, social progress and social security;
- Negatively affect health and life expectancy.
- Undermine a capacity to mitigate and adapt to climate change;
- Encourage displacement and migration;
- And heighten the risk of political instability and conflict.

Opportunities

A shift is occurring around the world that can be harnessed to reap benefits from the demographic dividend. Countries that reduce fertility and slow the growth of the youth population are able to increase investment in human, physical and natural capital and promote higher and more sustainable economic growth.

The systematic use of data on population trends is essential for the public and private sector to seize the opportunities associated with population dynamics. Migration is largely driven by economic and social disparities, but it can also help people respond and adapt to changes in environmental conditions.

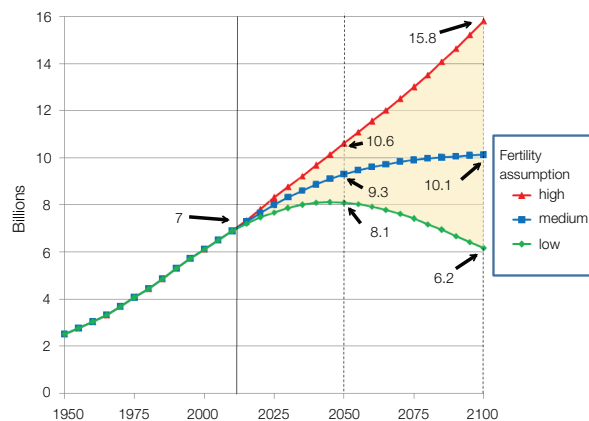
Likewise, if countries plan for -- rather than react to -- urbanization, they can anticipate and address many associated challenges. In urban areas, essential infrastructure, goods and services with including housing, water, sanitation, energy, health and education with can be provided at lower costs per person. Smart urbanization can lead to considerable energy savings in housing and transport and contribute to greener and more liveable cities. The private sector plays an important role in supporting the development of sustainable cities, and in creating scalable innovative solutions to address efficiencies in water, food and energy.

These efforts must be complemented by increasing investment and productivity in the agricultural sector, which encourages the sustainable use of land, water and energy; ensures equitable access to essential resources; and lends special support to smallholders and women. Investment opportunities also abound in the farming sector. Sustainable agricultural development is essential for poverty reduction and food security, and is an important driver of overall development.

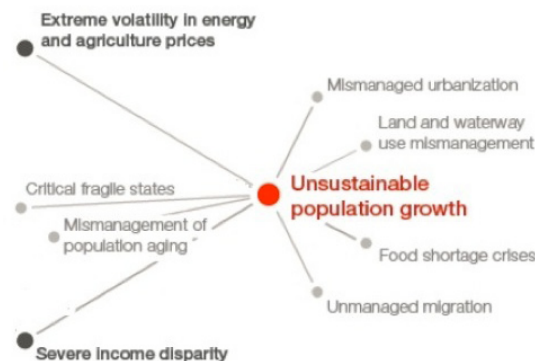
The Way Forward

To achieve the necessary policy change and effectively integrate population and demographic policies in the sustainable development agenda for the 21st century, change needs to happen now. With 2012 being the UN's International Year for Sustainable Energy for All and with the Rio+20 Earth Summit taking place in June, policy-makers have the opportunity to use such international processes to further develop understanding of how sustainable population growth and achieving water, energy and food security can go hand in hand.

Projected Global Population Growth under 3 scenarios*



* United Nations Department of Economic and Social Affairs, Population Division (2011). World Population Prospects: The 2010 Revision



Source: Global Risks 2012, World Economic Forum

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