



state of world population 2009

FACING A CHANGING WORLD: WOMEN, POPULATION AND CLIMATE

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18 NOVEMBER 2009—Family planning, reproductive health care and gender relations could influence the future course of climate change and affect how humanity adapts to rising seas, worsening storms and severe droughts, according to *The State of World Population 2009*, published today by UNFPA, the United Nations Population Fund.

International climate-change agreements and national policies are more likely to succeed in the long run if they take into account population dynamics, the relations between the sexes, and women's well-being and access to services and opportunities, the report concludes. Slower population growth, for example, would help build social resilience to climate change's impacts and would contribute to a reduction of greenhouse-gas emissions in the future, *The State of World Population 2009* found.

Most of the debate about climate change today has revolved around countries' relative responsibilities for limiting the growth of greenhouse-gas emissions and for funding efforts to shift to low-carbon energy and other technologies. What's the best approach for reducing carbon emissions? Who should shoulder the financial responsibility for addressing current and future climate change? "These questions are critically important," UNFPA Executive Director Thoraya Ahmed Obaid writes in the foreword to the report. "But also important are fundamental questions about how climate change will affect women, men, boys and girls differently around the world, and indeed within nations, and how individual behaviour can undermine or contribute to the global effort to cool our warming world."

The climate debate of the future must take into account the human and gender dimensions of every

aspect of the problem. Any treaty emerging out of the December 2009 Conference of Parties to the United Nations Framework Convention on Climate Change "that helps people adapt to climate change and that harnesses women's and men's power to reverse the warming of the earth's atmosphere would launch a genuinely effective long-term global strategy to deal with climate change," Ms. Obaid adds.

Elements of climate change

The temperature of the earth's surface has risen 0.74 degrees Celsius in the past 100 years. This increase may not seem much, but this warming has been sufficient to disrupt many of the planet's ecosystems to pose significant risks to human well-being. More importantly, if recent trends continue or accelerate as many climate scientists predict, the earth's temperature may raise another four to six degrees by 2100, with likely catastrophic effect on the environment, habitats, economies and people. The 10 warmest years globally since 1880 have been in the last 13 years.

With growing confidence, climate scientists around the world attribute the bulk of recent warming to the greenhouse gases injected into the atmosphere as a result of the activities of an increasingly wealthy human population, particularly in the industrialized countries. Increasing combustion of fossil fuels such as coal, oil and gas releases more carbon dioxide into the atmosphere, compounding and accelerating the atmosphere's "greenhouse effect." Deforestation and soil degradation also result in more carbon dioxide in the atmosphere, and activities from farming to refrigeration result in emissions of several other powerful greenhouse gases.



Impact on people

Climate change has the potential to reverse the hard-earned development gains of the past decades and the progress toward achieving the Millennium Development Goals. Setbacks are likely to result from climate-driven water scarcity, intense tropical storms and storm surges, floods, loss of glacial meltwater for irrigated agriculture, changes in food availability and possible health crises.

Climate change threatens to worsen poverty and burden marginalized and vulnerable groups with additional hardships. In Southeast Asia, for example, about 221 million people already live below the \$2-a-day poverty line. Many of the region's poor live in coastal areas and in low-lying deltas, and many of these poor people are small-holder farmers or people who earn their living from the seas. Poor households are especially vulnerable to climate change because their marginal income provides little or no access to health services or other safety nets to protect them against the threats from changing conditions.

Also as a result of climate change, sea levels will rise, threatening low-lying densely populated coastal areas and small island states.

In May 2009, *The Lancet* medical journal called climate change “the biggest global health threat of the 21st Century.” The “epidemiological outcome” of climate change on disease patterns worldwide will be profound, especially in developing countries, where existing vulnerabilities to poor health remain. The incidence of vector-borne diseases, for example, will rise. Millions of additional people may be affected by malaria, as rising temperatures allow disease-carrying mosquitoes to live at higher altitudes.

Climate and migration

Large-scale population movement is likely to intensify as changing climate leads to the abandonment of flooded or arid and inhospitable environments. The resulting migration will lead to many serious health problems, both directly, from the various stresses of the migration process, and indirectly, from the possible civil strife that could be caused by chaotic movement of people.

Millions of people now living in low-lying coastal areas may need to leave their homes if sea levels rise as predicted by most climate-change experts. Prolonged and severe droughts may drive more farmers from rural areas to cities to seek new livelihoods. Residents of urban slums in flood-prone areas may migrate to rural areas to escape danger. And in some instances, gradual environmental

degradation may erase income-earning opportunities, driving some across national boundaries.

The reasons for which people migrate or seek refuge are complex, making it hard to forecast how climate change will affect the future of migration. Climate change nonetheless seems likely to become a major force for future population movement, probably mostly through internal displacement but also to some extent through international migration.

Mitigating climate change

The influence of human activity on climate change is complex. It is about what we consume, the types of energy we produce and use, whether we live in a city or on a farm, whether we live in a rich or poor country, whether we are young or old, what we eat, and even the extent to which women and men enjoy equal rights and opportunities. It is also about our growing numbers—approaching 7 billion. As the growth of economies, population and consumption outpaces the earth's capacity to adjust, climate change could become more extreme—and conceivably catastrophic. Population dynamics tell one part of a larger, more intricate story about the way some countries and people have pursued development and defined progress and about how others have had little say in the decisions that affect their lives.

Not all people or countries, however, are created equal when it comes to the greenhouse-gas emissions that are warming our atmosphere. Until now, the industrialized countries generated the lion's share of climate-altering carbon dioxide and other gases but have been relatively immune to the effects of climate change. The developing world has been responsible for a smaller share of greenhouse-gas emissions, yet is already shouldering more of the burden for coping with and adapting to extreme weather events, rising sea levels, floods and drought. The industrialized countries created most of the problem, but the world's poor will face the biggest challenges in adapting to it.

The importance of the speed and magnitude of recent population growth in boosting future greenhouse-gas emissions is well-recognized among scientists, including those on the Intergovernmental Panel on Climate Change. Slower population growth in both developed and developing countries may help ease the task of bringing global emissions into balance with the atmosphere in the long run and enabling more immediate adaptation to change already under way. The extent to which slower population growth will matter, however, depends on the

future of world economic, technological and consumption trends.

The role of population growth in the growth of greenhouse-gas emissions is far from the only demographic linkage salient to climate change. Household composition is one such variable that affects the amount of greenhouse gases thrust into the atmosphere. Studies have shown that per capita energy consumption of smaller households may be higher than that of larger households. Some evidence suggests that changes in age structure and geographic distribution—the trend toward living in cities, for example—may affect emissions growth. Population dynamics are likely to influence greenhouse-gas emissions in the long run. In the immediate future population dynamics will affect countries' capacities to adapt to the impacts of climate change.

Disproportionate burden on women

Climate change will not only endanger lives and undermine livelihoods, but will also exacerbate the gaps between rich and poor and amplify the inequities between women and men. Women—particularly those in poor countries—will be affected differently than men. They are among the most vulnerable to climate change, partly because in many countries they make up a larger share of the agricultural work force and partly because they tend to have access to fewer income-earning opportunities. Women manage households and care for family members, which often limits their mobility and increases their vulnerability to sudden weather-related natural disasters. Drought and erratic rainfall force women to work harder to secure food, water and energy for their homes. Girls drop out of school to help their mothers with these tasks. This cycle of deprivation, poverty and inequality undermines the social capital needed to deal effectively with climate change.

Given women's significant engagement in food production in developing countries, the close connection between gender, farming and climate change deserves far more analysis than it currently receives. Because of greater poverty, lesser power over their own lives, less recognition of their economic productivity and their disproportionate burden in reproduction and child-raising, women face additional challenges as climate changes.

Marginalization of and discrimination against women and the lack of attention to the ways gender inequality hampers development, health, equity and overall human well-being all undermine countries' resilience to climate

change. Resilience is most likely to bloom and grow in societies in which all people can go to school, access health services, enjoy equal protection of law, and participate fully in directing their own lives and the destinies of their communities and nations. Often, as well, resilience has its own roots in culture, as in the many cases of traditions of generosity to those in need and cooperative work in the face of calamity.

Reproductive health

The 1994 International Conference on Population and Development, or ICPD, was a milestone in the history of population and development. At the conference, the world agreed that population is not about numbers, but about people. The conference's 20-year Programme of Action, adopted by 179 Governments, makes the argument that if needs for voluntary family planning and reproductive health care are met, along with other basic health and education services, then population stabilization will occur naturally, not through coercion or control.

There is good reason to believe that achievement of the ICPD's goal of universal access to reproductive health, in combination with improved education of girls and gender equality, would help achieve health and development objectives while also contributing to declines in fertility, which would in turn help reduce greenhouse-gas emissions in the long run. These fertility declines would be by themselves—even in combination with increased maternal and child survival, to which reproductive health, education and gender equality also powerfully contribute—lead to population levels below those foreseen in most greenhouse-gas emission scenarios developed for the Intergovernmental Panel on Climate Change.

Reining in climate change

Governments must anticipate and prepare for the stresses climate change is likely to add to the already-challenging business of advancing development, alleviating poverty, assuring access to education and health care, and moving toward gender equality. Successful approaches to climate change are much more likely to emerge in the context of sustainable economic and social development, respect for human rights and cultural diversity, the empowerment of women and access to reproductive health for all.

Specific measures to address the problem must, however, be based on fact, not frenzy. Gaps in research on many of the effects of—and solutions to—climate change must be filled before it is too late.

The complex nature and momentum of human-induced climate change suggest three areas of action needed now, with immediate, near-term and long-term benefits.

Adaptation, now and for the duration: Global temperatures are already climbing, so we have no choice but to adapt to the changes we face now and to anticipate those we can expect in the future. As temperatures are projected to rise for decades, and sea levels perhaps for centuries, learning to adapt and become more resilient to ongoing changes in climate is both an immediate and a long-term task. Adaptation, however, is not something that donor countries, banks or corporations can somehow bequeath to developing countries. Although financing and the transfer of technology and knowledge are essential to the effort, successful and lasting adaptation must arise from

the lives, experience and wisdom of those who are themselves adapting.

Immediate mitigation: Without halting the rise in global emissions of greenhouse gases and then rapidly reducing them, adaptation to climate change will become an endless—and perhaps impossible—challenge. The push to build our resilience to climate change cannot distract from the need to reduce emissions as rapidly as possible, starting now.

Long-term mitigation: Even the critically needed early successes in reducing emissions will be a prelude to a task likely to preoccupy people for decades, even centuries: prospering globally while keeping human activities from sending the global atmosphere and climate outside the range of human habitability.

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