



UNFPA issue brief on population dynamics and climate change

The International Conference on Population and Development (ICPD) and its holistic and rights-based approach to sustainability recognizes the complex linkages between population dynamics, human rights, sustained economic growth and sustainable development, and the environment. Taking population dynamics into account not only helps countries respond better to climate change and disasters, but it is particularly key to forward looking planning for climate change adaptation and disaster risk reduction, thus building resilience of people and investments. The Rio+20 outcome document recognizes that population dynamics – population growth or decline, mobility and urbanization-- matter for sustainable development.

🔥 **Climate change is one of the most important challenges for sustainability and has global implications that need to be addressed worldwide.** The climate change path is dependent on the intersection of population dynamics, economic growth and production and consumption patterns. Understanding this intersection is essential for generating pathways to sustainable development.

🔥 **When analyzing the demographic and climate change interrelationships the common error has been to simply equate a larger population with greater emissions.** Yet, as of now, only 2.5 billion people could be minimally considered as having consumption profiles that contribute to emissions.ⁱ Of this total, less than a billion actually have a significant impact on emissions and a smaller minority is responsible for an overwhelming share of the damage.

🔥 **While the immediate stabilization of population size would clearly improve the situation in the long term, it would make little difference in our current global ecological predicament.** With very few exceptions, countries displaying higher rates and levels of consumption have achieved low fertility levels.ⁱⁱ

🔥 **On the other hand, the higher fertility countries tend to be mired in poverty and have very low levels of consumption.** Poor countries and their populations have the right to development and to improve their living standards, a feat that in today's world requires higher economic growth. Under this scenario, their consumption profiles will and should increase, and unless this increase happens in a radically different manner than has been the case for wealthier countries, it will further contribute to climate change.

🔥 **Climate change will not impact everyone in the same way,** even those exposed to similar climate-related disasters and changes. The location, composition and characteristics of the population heavily impact vulnerability to climate change and prospects for adaptation.

🔥 **Increasing access to health and education, and achieving greater human rights for women and young people,** including their sexual and reproductive health and rights, is critical for sustainable development and also fundamental for adaptation to climate change. At the micro level, women and girls—particularly those in poor countries—are affected differently by climate change than men. Gendered division of labour, income differences between men and

women, power differences and cultural patterns and roles are key mechanisms affecting women's vulnerability to climate change and disaster risk.ⁱⁱⁱ Young people will be disproportionately impacted by climate change because of a range of social and biological developmental mechanisms.^{iv} Empowering women, increasing their livelihoods and ensuring access to education and health, including to sexual and reproductive health, can improve women and girls' adaptation, preparedness and resilience to climate change including drought, desertification and erratic rainfall, and environmental degradation.^v It also supports them in their growing role as agents of change for climate adaptation.^{vi}

🔥 **In addition, integrating population data, particularly small area data aligned with the geography of projected climate hazards, is critical for planning for climate adaptation, and planning for climate-resilient development.** However, relatively few tools make use of census and other population data – information that is vital for ensuring that adaptation planning accounts for and addresses vulnerability's social and demographic components. Such information should also be integrated into disaster risk reduction, early warning systems and disaster response efforts, to ensure that countries and localities have

full, up to date information on the populations vulnerable to and impacted by disasters.

🔥 **The rise of accessible geographic information systems, particularly as it coincides with the development of infrastructure for the 2010 round of censuses, has created an enormous opportunity** to change the way governments, researchers and policymakers think about and address climate vulnerability^{vii}, to render adaptation and preparedness more effective including for the most vulnerable (including the poor, women and girls, migrants and others), and to support proactive (as opposed to post-hoc) adaptation efforts. It is critical to move towards anticipatory adaptation, particularly in rapidly-urbanizing regions. From that standpoint, the fact that most urban growth in Africa and Asia is still to come implies that these regions have a valuable chance to prepare better for potential risks.^{viii}

To learn more about UNFPA's position and key asks in the post-2015 development agenda, please see **UNFPA's position paper "Empowering People to Ensure a Sustainable Future for All"**
<http://www.unfpa.org/public/home/news/pid/15466>

ⁱ McKinsey (2012), 'Consumers' are defined in that analysis as those with an income of at least ten dollars a day. Such a low bar obviously inflates the number of people who are making significant contributions to emissions. Nevertheless, it is useful in establishing the fact that a minority of the world's population are actually consumers/emitters.

ⁱⁱ Below-replacement fertility levels are when women are not having enough children to ensure that, on average, each woman is replaced by a daughter who survives to the age of procreation.

ⁱⁱⁱ Alber, G. (2009), Gender and Climate Change Policy, pp. 149-163 in: Population Dynamics and Climate Change, Guzman, J.M. e.a. (eds.), 2009, UNFPA and IIED

^{iv} Bartlett, D. e.a. (2009), Children in the Context of Climate Change: Linking Satellite and Other Spatial Data with Population Data, pp. 206-207 in: Population Dynamics and Climate Change, Guzman, J.M. e.a. (eds.), 2009, UNFPA and IIED

^v Wheeler, D. and D. Hammer (2009), The Economics of Population Policy for Carbon Emissions Reduction. Center for Global Development Working Paper, Nov 2010 and UNFPA. State of the World Population Report, 2009.

^{vi} For examples of women and young people as change agents see for instance UNFPA, State of the World Population Report, 2009 and United Nations Joint Framework Initiative on Children, Youth and Climate Change, Youth Action on Climate Change: Inspirations from around the World, 2013

^{vii} Balk, D, J.M. Guzman and D. Schensul, Harnessing Census Data for Environment and Climate Change Analysis, p. 93, in: The Demography of Adaptation to Climate Change, Martine, G. and D. Schensul (eds.); UNFPA, IIED and El Colegio de Mexico, 2013

^{viii} Martine, G. and R. Ojima, The Challenges of Adaptation in an Early But Unassisted Urban Transition, p. 139, in: The Demography of Adaptation to Climate Change, Martine, G. and D. Schensul (eds.); UNFPA, IIED and El Colegio de Mexico, 2013