

An Ethical Approach to Population and Climate Change

Climate change has finally grabbed the attention of the U.S. public and policymakers, yet the role of population has been all but overlooked until very recently. Today, interest in the relationship between global population growth and climate change is growing, as demonstrated by a spate of recent articles (e.g., Lahart et al., 2008). Many population experts see the world's focus on climate change as an opportunity to make population relevant again (e.g., PHE Policy and Practice Group, 2008; Smith, 2008). By getting governments and donors to recognize that climate change might be partly alleviated by addressing population growth, they believe they can help secure long-promised and sorely needed funding for international family planning.

For both practical and ethical reasons, we must think very carefully before developing advocacy arguments linking global population growth and climate change. Politically, an overstated argument could invite disaster by triggering backlashes from all sides of the issue, setting international fam-

ily planning back decades. Ethically, we must be exceedingly conscious of what we are asking, and why, before we hitch a ride on the climate change train. Only by framing the connections between population and climate change in their full context can we move forward in an ethical and helpful manner. Done well, a thoughtful and deliberative dialogue around voluntary family planning's contribution to mitigating climate change can help us better understand the significant role the United States plays in the world, not only as a consumer and polluter, but also as an important member of a global commons, and as a beneficent donor.

A Brief History of Population

From Thomas Malthus in the 1790s to Paul Ehrlich and Garrett Hardin in the 1960s, demographers and ecologists have raised concerns about the planet's ability to sustain exponentially increasing human populations. These arguments helped place population and family planning on the U.S. development agenda. Today, however,



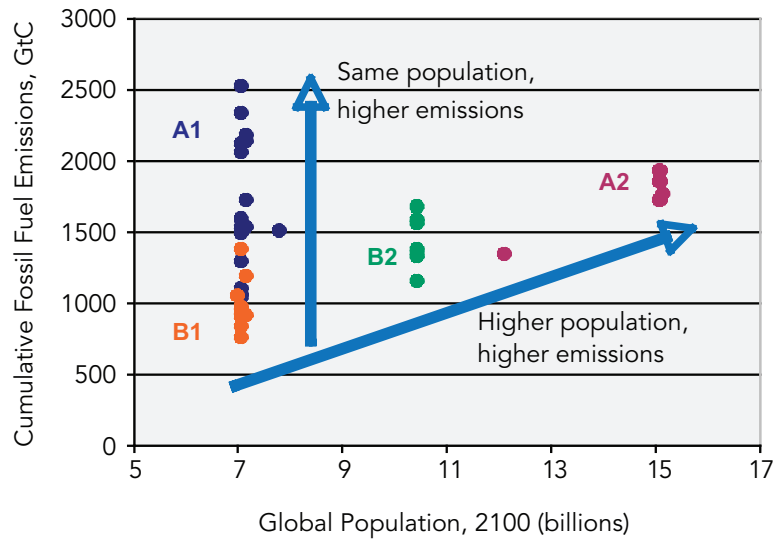
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Figure 1: Population-Emissions Relationship

Note: The X-axis marks the global population size in 2100 for each of the IPCC scenarios (A1, A2, B1, and B2), while the Y axis measures the cumulative emissions of carbon from 2000-2100, which are dependent on scenarios' economic and technological assumptions. In general, a higher population is associated with higher emissions, but lower population will not guarantee a low emissions outcome on its own.

Source: O'Neill (2008).



Malthusian alarmism has, for the most part, been left behind. Despite the massive growth of the world's population since 1798 (and since the 1960s, for that matter), technology and human innovation have kept famines and food shortages from causing the devastation and mass starvation that Malthus and Ehrlich presaged.

For years, many of the programs supported by the United States and others around the world were geared toward achieving specific demographic targets, often using heavy-handed, top-down schemes to reduce fertility. The 1994 International Conference on Population and Development (ICPD) was a significant crossroads for the population field, turning the focus of population programs away from demographic targets and incentives and toward voluntarism and individual rights, while also launching a more comprehensive approach to reproductive health and women's empowerment.

Feminists and human rights activists played a key role in forging a consensus with environmentalists at the ICPD, agreeing that individuals and couples who had the information and means with which to plan their families would likely choose to have smaller ones, thereby leading, from the bottom up, to more sustainable development. Donor countries agreed to provide increasing levels of funding through international development

assistance for the ICPD agenda. But today, while U.S. assistance for family planning remains the highest in the world, U.S. funding has declined significantly in real terms over the past decade (Population Action International, 2007).

Since 1994, advocates for increased funding have used many arguments and tried many ways to get the United States to meet its commitments, to no avail. And so here comes climate change—yet another avenue for advocacy and perhaps, some hope, the grand solution to the funding challenge. If only policymakers accept the argument that climate change cannot be resolved without stemming global population growth, government funding for international family assistance will be secured.

Unfortunately, it's not that simple.

How Population Affects Climate Change

Climate change is primarily driven by three factors (Davidson et al., 2007):

- Greenhouse-gas emissions;
- Economic growth that fuels energy consumption; and
- Population growth that fosters increased greenhouse gas-emitting activities.

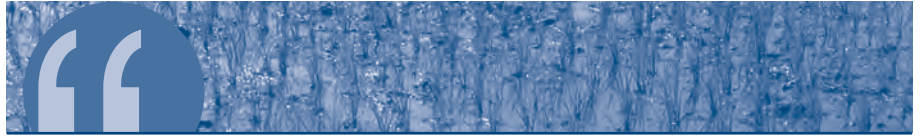
As population size has increased over the past decades, so, too, have emissions, both in the United States and globally (O'Neill, 2008). But while the trend lines run in parallel, the connection is far from unequivocal; in fact, there is a great deal of uncertainty about the precise impacts of population size and dynamics on climate change.

The Intergovernmental Panel on Climate Change's (IPCC) future scenarios vary greatly depending on a number of factors, including population dynamics. For example, if high consumption and emissions continue, the world will likely face significant climate change, even if population grows at a low rate. Alternatively, significant technological advances, such as renewable energy development or carbon sequestration, could coincide with rapid population growth to produce a relatively healthy climate (see Figure 1).

The "stabilization wedge" concept puts forward a range of some 15 interventions or "wedges," seven or eight of which could work together to prevent the doubling of emissions by 2050 (Pacala & Socolow, 2004). Most of these wedges require changing patterns of production and consumption—the vast bulk of which are driven by the industrialized world.¹ Speaking at the Woodrow Wilson Center in March 2008, IPCC author Brian O'Neill hypothesized that slowing population growth might potentially act as one wedge. But despite the likelihood that slowing population growth would have a somewhat limited impact on climate change, he argued the topic should be on the table, saying, "We need all the wedges we can get, and some wedges are harder than others to do. And if this is a wedge that also has lots of individual-level benefits, is a kind of win-win policy for other reasons, then it maybe should be one of the ones that's done first. But it's not going to solve the problem on its own" (O'Neill, 2008).

Some Ethical Concerns

Ethicist Ralph Potter wrote about U.S. population policy in 1971 that "alliances are formed by those who converge at any given moment in support of particular policies" (Institute of Society



Future population growth in the United States will have a hugely disproportionate impact on greenhouse gas emissions compared to the rest of the world.

Ethics and the Life Sciences, 1971). Those hoping to place population back on the policy agenda through the climate change discussion are attempting to create an alliance in support of increasing family planning assistance to developing countries. But is this effort ethical?

While consumption is clearly the primary driver of environmental degradation, including climate change, it appears evident that population growth is a contributing factor to some degree. And if population growth is proven to be destructive to public health and the natural environment, then governments have an obligation to intervene to lessen this damage.

But we must first recognize that, unlike climate change, population growth is not a consistently global phenomenon. Nearly all of the world's future population growth is expected to take place in developing countries, which currently produce the least amount of greenhouse gases, but whose contribution is expected to increase as their economies develop (Bongaarts & Bulatao, 2000). Ethically, those of us in the developed world cannot ask the people of these countries, many of whom struggle to subsist on a dollar or two a day, to slow their economic development for the sake of improving the global climate. So is it appropriate to ask them to slow their population growth to achieve the same end?

Consider this: The United States contains four percent of the world's population, but produces 21 percent of its greenhouse gases (EIA, 2007). Cumulatively, residents of the United

While the growing Indian population's demand for energy is predicted to double its total CO₂ emissions by 2030, the average U.S. citizen is estimated to be responsible for 13 times as much CO₂ as the average Indian. (Courtesy flickr user Daveybot; <http://www.flickr.com/photos/davemorris/365961797/>)



States have been the world's greatest source of greenhouse gases for the past decade, and will continue to contribute one of the world's largest shares, unless consumption patterns change radically. While some worry about the effects of the growth of countries like China, India, Nigeria, Pakistan, Indonesia, and Bangladesh on the environment, few mention the U.S. population, which grew some 50 percent over the past 50 years, and is expected to increase by another 140 million people by the year 2050 (Passel & Cohn, 2008). While this is far fewer people than India expects to add, it is roughly the same as Nigeria's projected increase, slightly more than Pakistan's, and more than twice as many new people as in Bangladesh or Indonesia (Population Reference Bureau, 2008).

In 2005, the average U.S. citizen was responsible for an estimated 20 metric tons of CO₂—some 20–30 times the emissions of the average Indian, Nigerian, or Guatemalan, and 73 times that of the average Bangladeshi (EIA, 2007; see Figure 2). I would argue that it is therefore not appropriate for those in the United States to speak of reducing fertility rates in Nigeria or Bangladesh

for environmental purposes without first mentioning the growth of their own population, whose impact on the environment is immensely more significant.² While continued economic growth in countries like India, China, and Brazil might drive their total CO₂ emissions higher—according to some estimates, China has already surpassed the United States—it is highly unlikely that they will approach U.S. per capita consumption levels in the near term (see Figure 3).

An Ethical Solution?

The issue of population growth is beginning to find its way onto the climate change table, and—just as some promote single technological solutions as quick fixes—family planning may be proposed by those seeking simple answers to an incredibly complex challenge. Consequently, it seems that those of us working on population issues must enter the climate change discussion, but we must do so with great care.

To be both credible and ethically grounded, arguments must follow two essential guidelines. First, we should not overstate the impact that slowing global population growth will have on climate change, but instead acknowledge that it would likely play only a limited role. The larger and considerably more significant solution lies in addressing the unsustainable patterns of production and consumption that continue to be the main drivers of climate change. These patterns must therefore dominate our discussions and our priorities as we determine and employ appropriate actions to mitigate climate change.

Second, we should affirm that population growth is not a uniformly “global” phenomenon, particularly in regard to climate change. Specifically, future population growth in the United States will have a hugely disproportionate impact on greenhouse gas emissions compared to the rest of the world. To be credible voices for slowing population growth as a means of mitigating climate change, U.S. advocates must address the challenge of their own country's growth before calling for slower growth in developing countries.

Only after laying this foundation should we turn to the importance of investing in family planning specifically as an environmental issue. And if we begin with the individual, we will be on quite solid ethical ground. Indeed, the ICPD approach (and the evidence) provides an excellent basis for this position.

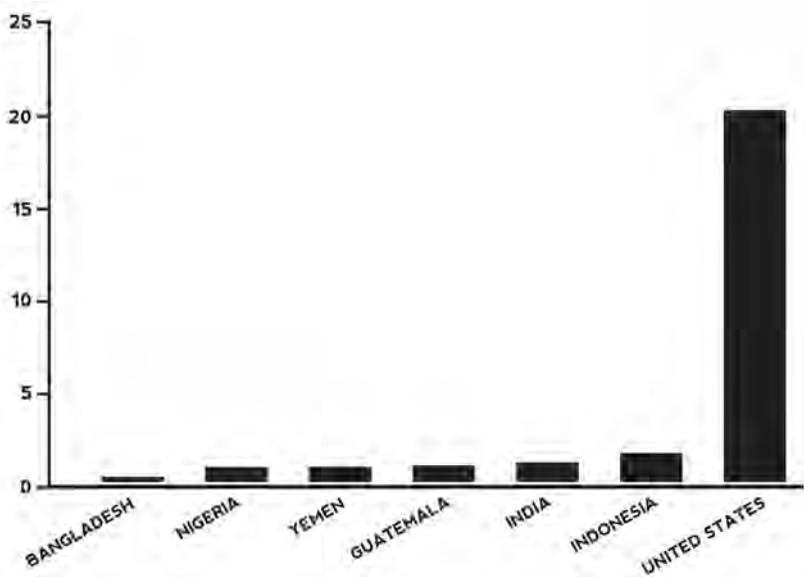
Currently, more than 100 million women around the world want—but do not have access to—modern methods of family planning (Sedgh, 2007). The high numbers of unintended pregnancies each year, including more than three million in the United States alone, attest to this tremendous unmet need (Trussell & Wynn, 2008). Helping address this need is not only the right thing to do, it is also a commitment the United States made at the ICPD in 1994.

The past four decades have shown that, given adequate information and access to services, couples will tend to choose to have fewer children, thereby enabling better health and economic outcomes for their families (Schultz, 2005; Behrman & Knowles, 1998). These choices will in turn contribute to slower population growth and, subsequently, to fewer negative impacts on the environment.

As the ICPD advises, family planning programs should not take place in isolation from other social programs. Efforts to improve health, advance gender equity, and expand educational and economic opportunities should be pursued in their own right, as well as in coordination with family planning efforts. Programs that integrate reproductive health services with efforts to improve livelihoods, for example, have demonstrated greater health and environmental benefits than single-sector programs (e.g., Castro & D’Agnes, 2008), and together, they all make a positive contribution to sustainable development (see brief on page 64).

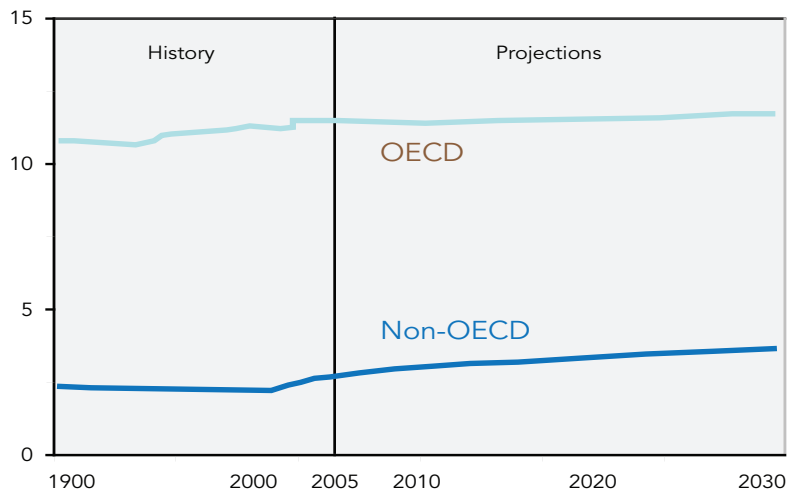
Perhaps most critically, family planning policies must prioritize freedom and justice, and they must be implemented with individual rights at their core, for in the end, it is individuals—not abstract millions—who share our planet. Individuals must have the freedom to decide the number and timing of their children,

Figure 2: Carbon Dioxide Emissions Per Capita, Selected Countries (metric tons)

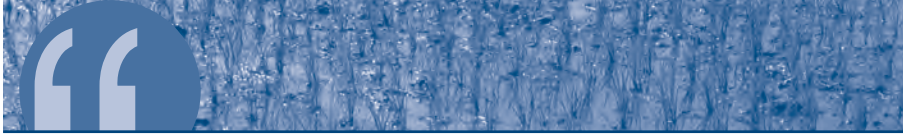


Source: EIA (2007). Chart by Storme Gray.

Figure 3: World Carbon Dioxide Emissions Per Capita, 1990-2030 (metric tons)



Source: EIA (2007; 2008).



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which, we must recognize, includes the freedom to decide to have large numbers of children.

Investing in meeting the unmet need for family planning, the education of girls, the empowerment of women, the promotion of public health, the conservation of natural resources, and in other socio-economic programs aimed at improving the quality of life of individuals and families around the world will contribute to the outcome that we all seek: healthy individuals living on a healthy planet for generations to come.

These policies cannot be supported solely by developing countries themselves; they require the commitment of the global community. The United States and other developed countries must understand their obligation to help others achieve at least a reasonable minimum quality of life. In meeting this duty, not only will they contribute to improving the health and well-being of millions of women and children around the world, but they will also indirectly reduce the impacts of population growth on the environment.

Let us not exploit a global threat to our survival to further a cause that should rightly stand on its own. Instead, let us think critically and act ethically to ensure the well-being of the planet and its inhabitants, both present and future. A careful discussion of the ways in which voluntary family planning can further individual rights, community development, and, to some extent, climate change mitiga-

tion, could increase awareness not only of the outsized contribution of developed nations to global emissions, but also of their appropriate role in the global community. If embarking upon such a discussion leads to renewed support and funding for family planning assistance, it will achieve a great deal of good.

Notes

1. Brian O'Neill (2008) cited ending deforestation, improving vehicle efficiency, and switching coal plants to natural gas as examples of other wedges.

2. I would argue that most family planning advocates are largely unprepared to engage in the inevitable (and often anti-immigrant) discussions about immigration raised by the question of U.S. population growth.

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REPORT ONLINE

A chart by Population Action International illustrates that while the level of U.S. funding for population assistance has varied since the 1970s, when adjusted for inflation, it has remained stagnant: http://www.populationaction.org/Issues/U.S._Policies_and_Funding/Trends_in_U.S._Population_Assistance.shtml

The Guttmacher Institute provides current estimates and in-depth analyses of women's unmet need for contraception, including the reasons why women who do not wish to become pregnant do not use contraceptives: <http://www.guttmacher.org/pubs/2007/07/09/or37.pdf>

In *U.S. Population, Energy and Climate Change*, the Center for Environment & Population explores how various aspects of U.S. population—including size and growth rate, density, per capita resource use, and composition—affect greenhouse gas emissions: <http://www.cepnet.org/documents/opulationEnergyandClimateChangeReportCEP.pdf>

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Population and Climate Change: Enhancing Community Resilience and Adaptive Capacity

A growing number of projects around the world are integrating population programs with traditional conservation and other natural resource management activities. These comprehensive community-based efforts are strengthening resilience, adaptation, and reducing vulnerability to the effects of climate change by:

- Slowing the growth of population pressure on overtaxed and climate-stressed natural resources and biodiversity;
- Enabling community stewardship and sustainable use of forests, soils, watersheds, coastal areas, and other climate-sensitive resources; and,
- Building local awareness of the connections between environmental conditions, human health, and behavior; as well as the capacity to plan and manage resources in the context of these connections at the local level.

A community-based distribution agent offers family planning services at her convenience shop on Culion Island, Philippines. (Courtesy PFPI).



Building Resilience Among Coastal Communities: The Philippines Example

Coastal resources and the people that depend on them are increasingly at risk in the Philippines: Between 1966 and 1986, the productivity of coral reefs off the coasts of the Philippines dropped by one-third as the national population doubled. In response to these challenges, PATH Foundation Philippines, Inc. (PFPI) established the Integrated Population and Coastal Resource Management (IPOPCORM) Initiative in communities in two Philippine provinces.

IPOPCORM seeks to improve food security and overall quality of life in communities that depend on aquatic resources. Its community-based approach includes:

- Education and outreach on population, environment, and food security relationships;
- Environmentally friendly livelihood development;
- Reproductive health service delivery; and,
- Community-based efforts to restore coastal resources, including mangrove reforestation and coral reef protection.

By collaborating with local government and NGO partnerships, IPOPCORM is improving reproductive health outcomes, enhancing community-based management of coastal and marine resources, and building capacity for a more sustainable future in which coastal communities will be better able to adapt to the impacts of climate change.

Source: Excerpt from "Human Population Growth and Greenhouse Gas Emissions," by the Population-Health-Environment Policy and Practice Group (2008). See also "Fishing for Families: Reproductive Health and Integrated Coastal Management in the Philippines," by Joan Castro and Leona D'Agnes (2008).