

Family planning a major environmental impact

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Some people who are serious about wanting to reduce their "carbon footprint" on the Earth have one choice available to them that may yield a large long-term benefit - have one less child.

A study by statisticians at Oregon State University concluded that in the United States, the carbon legacy and [greenhouse gas](#) impact of an extra child is almost 20 times more important than some of the other environmentally sensitive practices people might employ their entire lives - things like driving a high mileage car, recycling, or using energy-efficient appliances and light bulbs.

The research also makes it clear that potential carbon impacts vary dramatically across countries. The average long-term carbon impact of a child born in the U.S. - along with all of its descendants - is more than 160 times the impact of a child born in Bangladesh.

"In discussions about [climate change](#), we tend to focus on the [carbon emissions](#) of an individual over his or her lifetime," said Paul Murtaugh, an OSU professor of statistics. "Those are important issues and it's essential that they should be considered. But an added challenge facing us is continuing [population growth](#) and increasing global consumption of resources."

In this debate, very little attention has been given to the overwhelming importance of reproductive choice, Murtaugh said. When an individual produces a child - and that child potentially produces more descendants

in the future - the effect on the environment can be many times the impact produced by a person during their lifetime.

Under current conditions in the U.S., for instance, each child ultimately adds about 9,441 metric tons of carbon dioxide to the carbon legacy of an average parent - about 5.7 times the lifetime emissions for which, on average, a person is responsible.

And even though some developing nations have much higher populations and rates of population growth than the U.S., their overall impact on the global equation is often reduced by shorter life spans and less consumption. The long-term impact of a child born to a family in China is less than one fifth the impact of a child born in the U.S., the study found.

As the developing world increases both its population and consumption levels, this may change.

"China and India right now are steadily increasing their carbon emissions and industrial development, and other developing nations may also continue to increase as they seek higher standards of living," Murtaugh said.

The study examined several scenarios of changing emission rates, the most aggressive of which was an 85 percent reduction in global carbon emissions between now and 2100. But emissions in Africa, which includes 34 of the 50 least developed countries in the world, are already more than twice that level.

The researchers make it clear they are not advocating government controls or intervention on population issues, but say they simply want to make people aware of the environmental consequences of their reproductive choices.

"Many people are unaware of the power of exponential population growth," Murtaugh said. "Future growth amplifies the consequences of people's reproductive choices today, the same way that compound interest amplifies a bank balance."

Murtaugh noted that their calculations are relevant to other environmental impacts besides carbon emissions - for example, the consumption of fresh water, which many feel is already in short supply.

Source: Oregon State University ([news](#) : [web](#))

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