

Case Study 6

Population, Poverty, and Development: China and India

Two of the world's fastest growing economies, China and India, also happen to be the world's two most populous nations.

In 2010, India's population was nearly 1.2 billion, well over triple the number at independence despite introducing the world's first family-planning policy in the 1950. China's population remains larger, but its highly restrictive one-child policy, despite being fairly successful at slowing fertility, has apparently been less successful than approaches based on women's empowerment and education in some parts of India, such as the state of Kerala. What can we learn about population and development from the world's most populous countries?

In India, it is common to hear the view that "everything is growing faster in China than India, except for population." India, which had well under two-thirds of China's population half a century ago, is projected to surpass China's population by 200 million people by 2050. Like most developing countries, both countries' populations grew rapidly when their mortality rates fell and their birth rates fell much more slowly. Both countries have viewed population pressures as threatening prospects for future development.

It is well known that as incomes rise, fertility falls, due largely to the increased opportunity cost of women's time. The causality between fertility and growth runs in both directions. China's rapid economic growth since about 1980 has also been attributed in part to its lower fertility rate. India's increased growth rate since about 1990 may also be related to its more moderate decline in fertility. Thus population policy can potentially play an important role in setting the stage for growth. Moreover, to the degree that we accept Nobel economics laureate Amartya Sen's view that development is freedom, the greater opportunities available to young women when fertility is reduced or delayed is itself a key indicator of development success, and population policy can help realize these goals.

Population Policy in China

China has been the world's most populous nation for centuries. After the Communist takeover in 1949, Chinese leaders led by Mao Zedong took a broadly pronatalist stance, believing that a communist society could solve any population problems and that a larger population would mean a more

powerful country. Mao (whom China's leaders still call "60% right" about policy) went so far as to send advocates of population control to jail. However, in the face of famine in the late 1950s, these policies moderated.

In 1980, China initiated a tough new drive to deter births with a goal of lowering the annual birth rate to 1% during the decade. Stringent and often draconian measures to achieve that goal were introduced in 1982 and 1983 as the Chinese government adopted a policy of one child per family. Social and political pressures to limit family size to one child included requiring women to appeal to the neighborhood committee or council for formal permission to become pregnant. Although first births were routinely approved, second births were usually approved only if the first child had a serious birth defect or if the woman had remarried. Economic incentives included giving priority to one-child families in housing, medical care, and education. Mothers of two or more children were often denied promotions, and steep fines, sometimes in excess of ten times China's per capita income, were levied for second and third children. Although a growing number of exceptions have been introduced in recent years, the policy remains probably the most restrictive in the world.

Given such rigid national policies and a strong cultural preference for boys, it is not surprising that there have been many reports of girls receiving less medical attention, of selective abortion of female fetuses, and even female infanticide. Male-to-female ratios are higher than the normal level in many Asian countries, and gender bias is at least partly to blame. Amartya Sen's pioneering 1992 research estimated that 44 to 50 million women were already "missing" in China, depending on whether the comparison is to Western countries or to Africa. The most recent data confirm that these trends have continued. It is estimated that in 2010, there were 106 males for every 100 females in China overall; and in a trend pointing to a worsening of the problem, close to 119 boys were born for every 100 girls. Of course, these current cultural preferences may change with further economic development.

The full impact of China's population control programs is uncertain. Only time will tell whether the benefits of reduced population growth achieved through severe social and economic pressures for one-child families will be worth the cost of a harsh break with traditional family norms and perceptions regarding the value of children. Resistance in rural areas, where well over 60% of the population still resides, was apparently so widespread that in August 1988, when the Chinese government discovered to its surprise that the population had already passed the 1 billion mark, it

decided to increase its enforcement of the one-child norm in rural as well as urban areas. However, popular opposition again caused it to relax its stringent controls slightly and to focus more on elevating the status of women and providing greater old-age security.

By the mid-1990s, China's fertility rate reached 1.9 births per woman, and it fell further to 1.6 by 2009. This rate is below replacement level and consistent with a slow long-term decline in population growth. Because of population momentum, China's population has continued to grow as larger, younger cohorts replace smaller, older ones. However, the country's largest cohorts are now passing out of their childbearing years. The population growth rate has slowed dramatically, and the population is not expected to exceed 1.4 billion at its peak before starting to fall.

In practice, many families have two children rather than one, and others in rural areas, including ethnic minorities exempted from the one-child policy, have more than two children. But fertility rates are extremely low in the urban areas to which an increasing share of the rural population is moving. Typical estimates suggest that upward of 250 million fewer people were born in China than would have been born without the one-child policy—an enormous impact. There are now concerns that China will have to reevaluate the policy to prevent too high a dependency ratio of retired to working adults.

The apparent success of China's tough fertility policies have led some observers to see advantages of dictatorship rather than democracy in spurring development. But in fact there are several ways in which the lack of a free press in particular and democracy more generally has held back China's development. In Mao's "Great Leap Forward," at least 30 million people died due to poor government decisions and incentives for bureaucrats to send overly optimistic reports from the field. Democratic India, by contrast, has not had a famine since independence in 1947. Amartya Sen attributes China's lead in economic growth to its massive investments in health and education, which India has lacked. Dictatorship can be good or bad for fertility programs or any other aspects of development. But the risks of a very bad outcome are probably much lower with democracy.

Successful population control in China comes with its own risks and unintended consequences as well as substantial rewards. By 2050, China will have almost twice as many people above age 50 as below age 20. In addition, while fertility has fallen, preference for boys over girls has actually intensified.

Many Chinese families seem to feel that if they are to have only one child, it should be a boy, to carry on the family name and help support the parents in their old age. A 2007 report from China's State Population and Family Planning Commission concluded that the country may have about 30 million more

men than women of marriageable age by 2020 and warned that the result could be social instability. A 2009 study by economists Shang-Jin Wei and Xiaobo Zhiang provided robust evidence that China's recent new surge in savings is caused in large part by competitive investments in housing and other wealth accumulation by families seeking to attract brides for their sons. Such a savings surge even has potential implications for global imbalances (see Chapters 12 and 13).

In sum although rapid economic growth and coercion and incentives in family planning account for part of China's drop in fertility, other factors include female literacy, improved child health, and greater economic opportunities for women. These have also been factors in the strong success in fertility reduction in the Indian state of Kerala.

Population Policy in India

In 1949, India became the first country to implement a national family-planning program. It has proved to be relatively ineffective and has proceeded in fits and starts. By the early 1970s, observers were becoming increasingly alarmed by the very high rate of population growth in India. When Prime Minister Indira Gandhi tried to implement drastic population control in 1975–1977, a period during which she seized dictatorial powers, it was a failure. Reports of forced sterilizations, sometimes in mass “sterilization camps,” and other coercive measures ended up giving family planning a bad reputation in many areas of the country. Indeed, public revulsion toward these coercive fertility policies helped bring the “emergency” period to an end more quickly, and when elections were held in 1977, Gandhi was voted out of office. Her return to power in the elections of 1980 was made possible in part by her commitment not to reintroduce coercive birth control policies. Years later, villagers in some parts of India avoided health workers out of fear of forced sterilization.

However, family planning did become more widely practiced. Some of the acceptance of limits on family size reflected rising income among the more than 200 million middle-class Indians and somewhat improved conditions among a significant fraction of the poor. Some of it reflected modest moves back to policy incentives to encourage smaller families. There have been variations from state to state. In Madhya Pradesh, individuals who

had a third or subsequent child after January 2001 were banned from running for election to village council posts, spurring considerable controversy. In 2004, an uproar over reported higher fertility among Muslims than among Hindus—reports that turned out to be greatly exaggerated—revealed the continuing political sensitivity of the issue.

As fertility has fallen, a preference for boys over girls has developed, particularly in the “Hindi belt” in northern India. The result is a “missing women” problem parallel to China’s. Stronger male bias is actually found in the better-off states of India, and researchers Jean Drèze, Anne-Catherine Guio, and Mamta Murthi found that “female disadvantage in child survival is significantly lower in districts with higher poverty levels.”

P. N. Mari Bhat and A. J. Francis Xavier analyzed data from the National Family Health Survey and estimated that “in northern India, girls currently constitute about 60% of the unwanted births and that the elimination of unwanted fertility has the potential to raise the sex ratio at birth to 130 boys per 100 girls.” Such a dramatic imbalance seems likely to lead to future social stress. As of 2010, the ratio of males to females in India as a whole had reached 108 to 100, one of the highest in the world.

Kerala, a state on India’s southwest coast that has emphasized poverty reduction and human development, is an important case in point. By the mid-1990s, Kerala’s fertility rate had fallen to just 1.7 births per woman and has remained low, implying a slowly falling population over time (in the absence of in-migration). Thus Kerala’s fertility rate was until recently less than that of China, but unlike China, the dramatic reductions in fertility in Kerala were achieved without coercion, let alone China’s huge direct economic incentives for lowered fertility.

Norms of behavior can be highly influential, and multiple equilibria resulting from different expected norms of behavior are possible, as explored in Chapter 4 and applied to population norms in this chapter in section 6.4. Amartya Sen has observed that

there is much evidence that the sharp decline in fertility rates that has taken place in the more literate states in India has been much influenced by public discussion of the bad effects of high fertility rates, especially on the lives of young women and also on the community at large. If the view has emerged in, say, Kerala or Tamil Nadu that a happy family in the modern age is a small family, much discussion and debate have gone into the formation of these perspectives.

In addition, and especially more recently, greater awareness on the part of rural women of urban norms of women's empowerment, facilitated by village television and Internet, may have made a big impact, proving that cultural awareness can be powerful. Robert Jensen and Emily Oster provide some evidence on the power of TV in India.

While television, billboard, and other advertising in India has promoted family planning, and there is some evidence that these campaigns can have some positive impact on their own, such efforts have been far more successful when the social climate has changed enough to be receptive to the message. This helps explain why nongovernmental organizations working for comprehensive rural development have often apparently had more success than many government programs. In Kerala, if the official campaigns supporting small families have seemed more effective than elsewhere, it is largely because both social and economic conditions on the ground changed previously or simultaneously. More than 85% of women in Kerala are literate, which means they have more power in the household and opportunities in the workforce as well as the ability to read print materials about fertility and family planning. Some of Kerala's success is due to the traditionally higher status of women in the local culture. But there is no reason that Kerala's success cannot be duplicated elsewhere in India if there is the political and social will.

Sen concluded that Kerala's impressive results in fertility reduction were achieved

“mainly through the emergence of new values—a process in which political and social dialogues have played a major part. The high level of literacy of the Kerala population, especially female literacy, which is higher than that of every province of China, has greatly contributed to making such social and political dialogues possible.”

The success of Kerala suggests that fertility reduction may depend not on rapid economic growth or even, in its absence, on draconian governmental policies but rather on grassroots human development emphasizing women's empowerment, in which civil society plays a leading role.

Sources

Acharya, Keya. “Sterilisation in India.” *Contemporary Review* 279 (2001): 26.

Barro, Robert J. *Determinants of Economic Growth: A Cross-Country Empirical Study*. Cambridge, Mass.: MIT Press, 1997.

“Can advertising create social change?” *Businessline*, January 20, 2000, p. 1.

Dasgupta, Partha. “The population problem: Theory and evidence.” *Journal of Economic Literature* 33 (1995): 1879–1902.

Drèze, Jean, Anne-Catherine Guio, and Mamta Murthi.

- "Mortality, fertility, and gender bias in India: A district-level analysis." *Population and Development Review* 21 (1995): 745–782.
- Drèze, Jean, and Mamta Murthi. "Fertility, education, and development: Evidence from India." *Population and Development Review* 27 (2001): 33–63.
- Jensen, Robert, and Emily Oster. "The power of TV: Cable television and women's status in India." University of Chicago, May 2007, <http://home.uchicago.edu/~eoster/tvwomen.pdf>.
- Kremer, Michael. "Population growth and technological change: One million B.C. to 1990." *Quarterly Journal of Economics* 108 (1993): 681–716.
- Mari Bhat, P. N., and Francis Xavier, A. J. "Fertility decline and gender bias in northern India." *Demography* 40 (2003): 637–657.
- McElroy, Marjorie, and Dennis Tao Yang. "Carrots and sticks: Fertility effects of China's population policies." *American Economic Review* 90 (May 2000): 389–392.
- Pritchett, Lant H. "Desired fertility and the impact of population policies." *Population and Development Review* 20 (1994): 1–55.
- Sen, Amartya. *Development as Freedom*. New York: Knopf, 1999.
- Sen, Amartya. "Missing women." *British Medical Journal* 304 (1992): 587–588.
- Sunil, T. S., V. K. Pillai, and A. Pandey. "Do incentives matter? Evaluation of a family planning program in India." *Population Research and Policy Review* 18 (1999): 563–577.
- Wei, Shang-Jin and Xiaobo Zhang. "The competitive saving motive: Evidence from rising sex ratios and savings rates in China." NBER Working Paper No. 15093, June 2009, <http://www.nber.org/papers/w15093>.