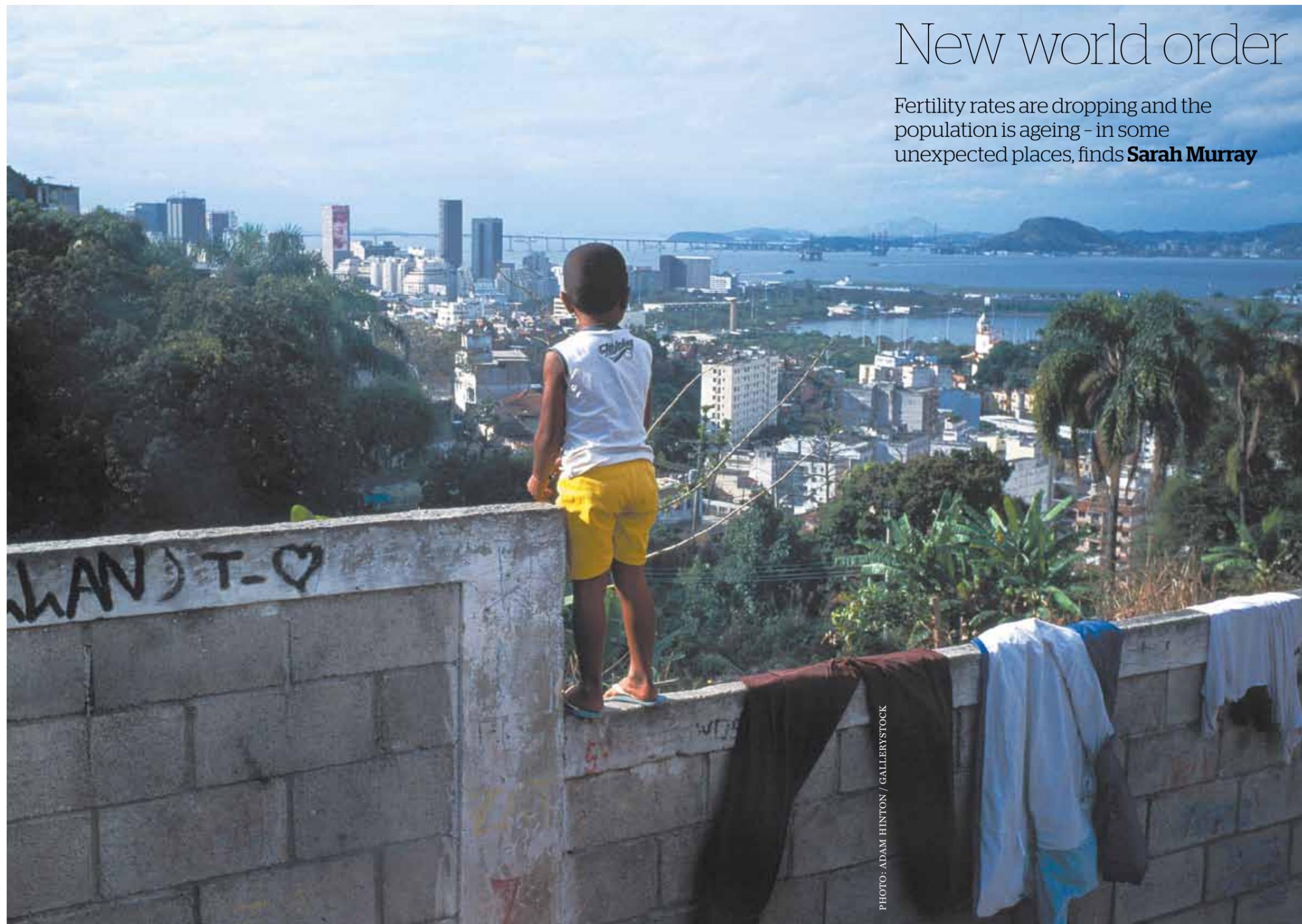


OVERPOPULATION BIRTH RATES



New world order

Fertility rates are dropping and the population is ageing - in some unexpected places, finds **Sarah Murray**

PHOTO: ADAM HINTON / GALLERYSTOCK

Since the 1950s, Brazilian soap operas have gripped the nation with storylines covering everything from illicit affairs and family intrigue to alcoholism and revenge murders. As well as providing drama, however, they have had another impact - on fertility rates. Researchers from the Inter-American Development Bank tracked Globo, the leading Brazilian television network, and found that the number of live births per woman was far lower in parts of the country that received the company's signal than in areas that did not.

That such a drop in the birth rate should occur in a developing country is something new. And the trend is being replicated in many other areas. "One phenomenon that is not widely enough appreciated is just how dramatic the drop in birth rates has been in so many parts of Asia, Latin America and now the Middle East," says Nicholas Eberstadt, political economist at the American Enterprise Institute, the conservative think-tank.

Nevertheless, expanding populations remain a salient feature in many regions, notably Africa, where 39 of the continent's 55 countries have "high" fertility rates (defined by the UN as a country where the average woman has more than 1.5 daughters). Rates are also classed as high in nine countries in Asia, six in Oceania and four in Latin America.

"Poverty is closely associated with relatively high fertility and relatively rapid population growth," says Hania Zlotnik, director of the population division at the UN's department of economic and social affairs. "Almost all countries classified by the UN as 'least developed' also tend to have high fertility."

Watching developments: the expansion of Brazil's economy has gone hand in hand with a drop in the country's birth rate

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Moreover, low fertility rates do not necessarily free countries from the pressures of rising populations. In the Philippines, fertility rates are not particularly high (about three children per woman). "But low mortality means they still have generations that are increasing by more than 50 per cent," says Zlotnik. "So it's a better measure of the challenges these countries have in producing enough food, jobs and investing in education."

Nevertheless, a growing number of low-income countries are among those with falling fertility rates. Roughly 75 per cent of the world's population now lives in low-fertility countries, according to the UN, including China, Brazil, the Russian Federation, Vietnam, Iran and Thailand. "There is an incredibly high-speed demographic transition going on, and it's going on at a lower and lower gross domestic

product per capita," says Duncan Green, head of research at Oxfam, the charity. "You have got about 59 countries that are not replacing their own population – and 18 of those are developing countries."

Soap watching – which shifted women's perceptions of social issues such as marriage, education and contraception in Brazil – is not the only factor driving down fertility rates in developing countries. In some cases, government policies have had an impact.

A few measures have seemed draconian, most notably China's one-child policy (although this is no longer strictly enforced, particularly in rural areas).

Others have taken a more cautious approach. In Bangladesh, education has been successful in shifting attitudes to childbearing. "It was a personal approach, using methods that uneducated women could unde

Low fertility rates do not necessarily free countries from rising populations

The burden of fertility: poverty is associated with high population growth

stand and that was sensitive to the cultural constraints of a Muslim population," says Zlotnik.

Elsewhere, other factors are shaping demographic changes. In the Russian Federation, poor reproductive healthcare – which poses dangers to women during childbirth – has combined with falling marriage rates and a growing tendency for women to have fewer than two children.

"There is a revolution in the family that is going on in many low-income countries, and you see this flight from marriage going into full throttle in supposedly traditional Muslim-majority areas as well," says Eberstadt. "That is going to have huge implications for society and for economic possibilities in the generation ahead."

Demographic changes in some developing countries relate less to falling fertility rates and more to rising numbers of older citizens, as child mortality drops and people live longer. As populations age, these places will be left with fewer workers, a trend that has implications for growth.

Until now, the fall in child mortality rates has helped countries such as China and India, supplying them with new workforces. "It is very different from the population growth we had in the 1960s and 1970s, because it is mostly in people of working ages," says Andrew Mason, head of the population studies programme at the University of Hawaii. "So if countries are successful in creating jobs, the population growth we are experiencing now is a spur to economic growth."

However, as the rate of retirement accelerates, that growth could slow. And while ageing populations have generally been seen as a rich-country problem, many developing countries are ageing at a much faster rate.

Roughly 76 per cent of the world's people aged 65 and over will live in developing countries by 2040, according to the US Census Bureau, compared with 62 per cent in 2008. The bureau also found that in the year to July 2008, more than 80 per cent of the world's net gain of older individuals took place in developing countries.

In China, the prospect of a large number of economically unproductive citizens has even prompted a questioning of the one-child policy. The country is considering a gradual relaxation in the limit on the number of children couples can have.

Part of the worry, too, is that the need to look after ageing citizens will place an increasing burden on society. And while this matches the concerns of mature economies, the challenge for developing countries is that many have not established the social systems needed to step in when children no longer take care of elderly parents.

"If you have an ageing population before you have a welfare state in place, you have some serious problems," says Oxfam's Green.

"So if you look at the problems facing rich countries – mental health, ageing and pensions, health services, non-communicable diseases – all these things are moving south at a phenomenal rate."

The trends take demographers into new territory. "A lot of the stuff that is happening is going to come as a surprise, not only to informed lay persons, but to demographers as well," says Eberstadt of the American Enterprise Institute. "Because demographic theory has not anticipated this." ■

If you have an ageing population before you have a welfare state, you have some serious problems'

This is a man's world Gender imbalance could have a significant impact

It is easy to assume that gender-driven infanticide is limited to poor rural communities, driven by the need for sons to work on the land. However, in countries such as India and China, traditional preferences combined with rising incomes and the availability of technology mean that more and more parents are opting for sex-selective abortions.

"What is worrying is that it is happening among the middle classes in more wealthy areas," says Mara Hvistendahl, author of *Unnatural Selection: Choosing Boys Over Girls, and the Consequences of a World Full of Men*. The highest male-to-female sex ratios at birth are in east Asia, where 119 boys are born for every 100 girls, according to the UN Development Programme (the norm is about 105 boys to every 100 girls).

While governments have responded by banning sex-selective abortion, it is difficult to stop. "The trouble is, technology is outpacing regulation, so you've got people cycling from village to village with a scanner on the back of a bike," says Duncan Green, head of research at Oxfam, the charity. "And the adverts say 'spend 1,000 rupees now and save 10,000 rupees on a dowry down the line.'"

It is unclear precisely how rising numbers of boys will affect developing countries, but, for a start, men are already having trouble finding wives, leading to the purchase of brides, which puts women at risk of trafficking.

"A huge trade in marriage has emerged, where men are travelling to poorer countries to buy brides," says Hvistendahl. In many South Korean fishing communities, she says, about 40 per cent of marriages are now between local men and foreigners.

'Where men outnumber women, the picture that emerges is pretty grim'



In the US in the 19th century, some states in the Wild West had seven men for every woman. Crime was rampant and the murder rate soared. "If you look back at societies where men significantly outnumbered women, the picture that emerges is pretty grim in terms of social stability," says Hvistendahl.

Education may be the answer. However, governments have until recently relied on simple messages directed at rural communities, as illustrated by Chinese propaganda posters showing happy families whose one child is unfailingly a girl.

"But if you look at where it is really happening – in wealthy districts in cities – you need a more sophisticated message," Hvistendahl says. ■ SM



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