Managing population growth

The demographic imperative

With global population predicted to rise to over nine billion this century, can we find a solution to the problem of ever-increasing strains on resources without resorting to alarmism and xenophobia?

summary

- Global population will top seven billion by the end of 2011 and is expected to surpass nine billion by 2050.
- Alarmists have long anticipated that population growth will cause famine, disease and war – a world view that has fuelled right-wing and anti-immigration sentiments.
- Despite continued population growth, fertility rates are down worldwide, even in developing countries, a trend that has taken many by surprise.
- But if we are to successfully distribute the world's limited resources, we must put developmentalism, progressive redistribution and universalistic health and other social policies at the top of the development agenda.

World population rose to 6.9 billion in 2010. Nearly 80 million people are being added to the total each year, and the seven billion mark is likely to be reached before the end of 2011. With one-fifth of this number still beset by abject poverty, the prospects of an additional two billion people by mid-century needs to be pre-empted by implementing employment and equity-focused development strategies now, before it is too late.

Despite the increasing population, fertility and birth rates have been declining worldwide in recent decades and, hence, this increase is slowing as well. According to a United Nations (UN) projection carried out in 2004, the number of inhabitants in our global village is expected to peak at 9.22 billion in 2075 – with almost all of this increase destined to take place in developing countries.

While these projections are based on fairly cautious mid-range guesstimates of how fertility and mortality will change over the next 40 years, the bulk of the global population increase is more or less guaranteed by population momentum, even if fertility falls much faster than expected. In other words, today's baby boomers in countries such as Yemen, Uganda, Mali and India will keep population growing in these countries for the next generation, even if they reduce their average fertility to below replacement levels of fewer than two children per women.

What does this mean for developing countries? Or, more precisely, what are the implications for the world's poor? Will we be able to feed an ever-growing population, or to employ it at reasonably decent standards of living? With the World Bank estimating that around 1.4 billion people live on less than a euro a day, what will two billion more people do to this situation – bearing in mind that most of them will be born in the world's poorest countries?

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Malthusian nightmare scenario?

There are many perspectives on these questions, some alarmist, others more reassuring. The alarmist perspective tends to dominate public perception with what are often called Malthusian views – after Thomas Malthus, who predicted in the late 18th century that population growth would outstrip food production, resulting in famine, disease, war and other calamities that would ultimately keep population growth in check. Such extreme predictions have their modern iterations in iconic books such as *Silent Spring*, written in 1962 by Rachel Carson, *The Population Bomb*, written in 1968 by Paul Ehrlich, and *The Limits to Growth*, written in 1972 by a team of authors at the Club of Rome think tank.

Kenneth Smail, an American anthropologist, has also re-invoked Malthus for the 21st century, arguing that Earth's

A passenger train in Dhaka, Bangladesh, September 2008.

long-term sustainable carrying capacity may not accommodate much more than two to three billion people – roughly the population of the world in 1950. These views definitely have their appeal, as they continue to underwrite typical journalistic discourses on population and food production, such as the idea that rising population causes higher food prices, which in turn gives rise to food riots, potential resource wars and famine.

Many of these messages have also been contentiously tied up with xenophobic and anti-immigrant sentiments in both Europe and the United States. One example is *Population Politics*, written in 1993 by Virginia Abernethy, an American anthropologist who has described herself as an 'ethnic separatist' and has been an important figure behind anti-immigration movements in Arizona. The association of such reactionary attitudes with population control is partly to blame for the negative connotation that family planning has come to evoke among more progressive folk, adding to the human and gender rights concerns regarding the intrusive abuses on women's lives that family planning has often entailed. This said, family planning has also been under attack by the religious Right due to its association with contraception and even abortion.

Reflecting on this politicized imbroglio, Eric Ross contends, in his 1998 book *The Malthus Factor*, that Malthusian arguments obscure the real roots of poverty, inequality and environmental degradation in capitalist development, with the result that poor people are blamed for environmental destruction rather than treated as the victims of such capitalist development.

Malthusian predictions have not, as yet, come to pass. Mass famines have largely been averted because the world has managed to increase food supplies in pace with population growth. This point is eagerly pointed out by many so-called 'anti-Malthusians', including Julian Simon, who attacks ideas of scarcity in his 1981 book, *The Ultimate Resource*, with a faith in the ability of free markets and human innovation to deal with population growth. The well-known writings of Danish economist Ester Boserup are also often considered part of this camp, although she qualified her own arguments by stressing that adaptations to population growth take place over long sweeps of human history and are not necessarily the result of short-term market mechanisms.

It is true that increases in food production over the past 60 years have been achieved through the intensified use of chemical fertilizers, particularly synthetic nitrogen fertilizers. But this dependence has questionable environmental consequences, some of which are related to climate change. More generally, 'Green Revolution' technologies are energy intensive and dependent on petroleum-based resources.

These points have been discussed at length by leading experts in the field of population and development. For example, Tim Dyson in his 2005 article, 'On Development, Demography and Climate Change', suggests that while Malthusianism might not apply in the conventional sense, it >

might soon apply at a global level in terms of the long-term impacts of our modern industrial way of life on climate change.

Neo-Malthusian logic

While crude Malthusian arguments have been largely refuted by events, more subtle forms of neo-Malthusian thinking persist. These rely on the idea of a self-reinforcing poverty-population-environment spiral. The theory here is that poverty induces higher fertility among poor people because children provide old age security as well as extra labour and income. This places pressure on the environment, which in turn worsens poverty. The poor are thus doomed to poverty until they can either lower their birth rates or else be lifted out of poverty by some other means. The argument infers that, because poor people have more children than rich people, worsening poverty must either cause higher fertility or prevent it from being reduced from very high levels.

Some of the basic premises of this neo-Malthusian logic have, in fact, been largely refuted by contemporary demographic research. It is now accepted that fertility has been falling rapidly in poor countries and that this is occurring largely irrespective of income level. At first, this fact took many demographers by surprise. Fertility is already falling rapidly in many African countries – to almost replacement levels in a number of urban centres. There are only a few places in Africa where fertility decline has not yet started.

Interestingly, despite the recognized importance of girls' education for fertility reduction, uneducated rural women have also been reducing their fertility. Around 60% of fertility reduction in India between 1991 and 2001 is attributable to women with little or no education. Fertility decline in Morocco has been basically the same among both illiterate rural and literate urban women.

The insight that poor countries and poor people can and do reduce their birth rates has driven much new thinking in demography since the 1970s. The field has since moved away from older ideas rooted in a 'modernization theory' perspective of population and development, and towards more subtle distinctions between the processes of human development on the one hand, and the processes of capitalism, hierarchy and power on the other.

In other words, poor people are perfectly capable of 'modernizing' demographically while still remaining poor economically. Fertility transitions are taking place throughout the world – usually at a more rapid pace in the places where transition has begun later. However, this tells us little about the respective economic development paths that each society will ultimately follow.

They who pay, eat

World population is nonetheless continuing to rise rapidly despite falling fertility rates, mostly in poor countries with limited resources. The impact of this rise on poverty and hunger must be understood in terms of distribution. Regardless of our ability to produce enough food to feed the growing global population, hunger persists in the world because food is not equitably distributed.

Some parts of the world have a surplus (even an extreme surplus), and others a deficit that sometimes results in hunger and famine. To understand this, we need to understand how food is produced and distributed at regional and local levels. This is as much a political economy question as a logistical one, as it is rooted in the power relations that govern both local and global economies.

Distribution is hugely influenced by income, particularly in today's liberalized global economy where the ability to purchase food increasingly determines who gets supplied.

People's ability to buy food can be expressed both in terms of having the money (or other means) to obtain it and also in terms of being able to use this money (or those means) freely for that purpose.

This was the central theme in the early work of Amartya Sen, who set out to explain famine through his somewhat convoluted 'entitlement' approach, which later evolved into his capability approach. This has led to debates over whether famines are caused by declines in the availability of food or, as he proposed, by a breakdown in people's ability to purchase food, despite sufficient supplies.

The main point – one that was made long before Sen – is that poverty, hunger and famine are as much issues of demand (or the inability to enact demand) as they are of supply. Indeed, this was the essential insight of John Maynard Keynes' theory of effective demand, which he developed in the 1930s as a means to explain unemployment. Keynes himself acknowledged Malthus' work on famines as an important source for his ideas.

So, following the trail of Sen takes us back to the classical economists, who were fundamentally interested in questions of distribution, unlike modern mainstream economists, who have tended to assume away the problem of who gets what by treating it as an issue of market exchange.

Demographic drivers of urbanization

In terms of population growth, distributional questions can be considered at both micro and macro levels. At the micro level, population growth is generally experienced as an increase in the size of families, as a consequence of more children surviving to adulthood. In an agrarian setting, this puts more pressure on land resources, as existing plots of land are stretched to support more people. Such a population increase can drive poor families further into poverty in situations where land distribution is very unequal or where households with smaller holdings struggle to subsist on their land (if they have land).

This strain on poor rural households is not resolved by commercializing agriculture or by increasing the capital intensity of agriculture – for example, by using tractors instead of people. These types of change generally increase labour productivity, but at the cost of employing fewer people, and they do not necessarily make the land more productive. Rather, they tend to concentrate the use of land into the hands of fewer people. Less employment combined with more land

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Makoko Riverine slum in Nigeria's commercial capital, Lagos, May 2007.

concentration therefore exacerbates the strain on smallholders and simultaneously reduces the possibility of finding work on larger farms – usually the lifeline of the landless and of poor farmers whose own land cannot meet their subsistence needs.

Some family members (or whole households) move into off-farm activities as a consequence of these strains, thus driving the processes of urbanization, regardless of whether there are decent jobs and a viable living to be made in the towns and cities these people are moving to. Where there are not, urbanization can actually turn rural poverty into urban poverty, as has been witnessed in many developing countries and which World Bank poverty statistics are particularly inept at measuring.

The crucial role of off-farm jobs within such transitions becomes particularly evident at the macro level as whole societies go through these transitions together. Paul Demeny, in his 2003 article, 'Population Policy Dilemmas in Europe at the Dawn of the Twenty-First Century' strikingly contrasts Russia, currently one of the most extreme cases of population shrinkage, and Yemen, one of the fastest-growing populations in the world. In 1950, Russia had a population of 102.7 million, while Yemen had a population of 4.3 million. By 2000, Russia's population was 145.5 million, while Yemen's population had increased fourfold to 18.3 million. Based on UN projections, Russia's population will fall back to 104 million by 2050, whereas Yemen's will increase more than fivefold, to 102 million. Even if Yemeni women were to suddenly substantially reduce their fertility soon, the bulk of this increase is more or less already guaranteed by population momentum.

Similarly, as pointed out by John Cleland at a talk in The Hague in 2009, the population of Niger, which recently suffered from famine and food shortage, would increase at current fertility rates from about 16 million in 2010 to 80 million by 2050. Even if the fertility rate is reduced from the current eight births per woman to 3.6 – as the UN expects – the population will still reach 50 million by 2050. While Yemen and Niger are severe cases, they are not totally exceptional, as many rapidly growing countries in Africa and parts of Asia are set to experience a doubling, if not a trebling or more of their populations by 2050.

The employment dilemma

In the face of such inevitable population expansions, the obvious developmental question is: how will such a large number of people be meaningfully employed? The potential for agriculture to productively absorb such increases is probably close to nil, given the already over-stretched land resources in most of these countries. The increase in employment will most certainly need to occur in the secondary sector (manufacturing and construction) or in the tertiary sector (services, broadly speaking). Given the low degree of employment creation relative to output that is offered by modern manufacturing nowadays, the bulk of this employment will probably need to be generated in services, largely in urban areas.

In other words, Yemen's hugely increased labour force will need to be employed mostly outside agriculture. And with little employment generated in enclave sectors such as petroleum, Yemen would need to become the new South Korea, or even the new China, alongside dozens of other countries competing to become the same. Since modern manufacturing generates relatively little employment, these countries would also need to institute strong redistributive

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Alamy / Brian Atkinson

New Delhi, India.

mechanisms in order to guarantee that any wealth generated by the manufacturing or enclave sectors would be circulated throughout the rest of the economy. This wealth, in turn, would have to create decently paid employment in the largely-urban service sector, with public-sector employment playing a leading role.

And even then, in the best of scenarios, Yemen and other countries would need an outlet of international emigration. After all, during Europe's phase of rapid population growth, as much as 20% of its population increase emigrated to the 'New World' colonies, which had been murderously cleansed for the purpose. Emigration from developing countries today accounts for a far smaller share of population increase than in these earlier European cases. Yet these countries face a greater need for emigration, with significantly fewer resources to face the challenges of population increase at home.

Developmental solutions

A developmental solution to this unfolding situation needs to be earnestly sought by all, Left and Right, North and South. The countries, particularly in East Asia, that have been most successful at both rapidly reducing fertility and generating employment have been generally characterized by a combination of strong developmentalism and universalistic social policies.

Developmentalism in this sense means state-led industrial policy rooted in nationally owned firms, regulated capital accounts to ensure that wealth remains national, and a bias towards generating employment rather than efficiency. This is the opposite of the neoliberal dictates that demand employment austerity in the name of (transnational) firm profitability.

Universalistic social policies, especially in health, provide crucial redistributive mechanisms in the economy. They also provide the administrative and social infrastructure that allows for rapid progress in both birth and death control – the latter being as important as family planning in bringing about sustained reductions of fertility.

South Korea and Taiwan are obvious examples of where this approach has worked well. But Thailand (at least, up until the East Asia crisis in 1997) and China are other examples. In fact, China's success in reducing fertility in the 1970s from a rate of 5.8 in 1970 to 2.8 by 1979 – before the introduction of the one-child policy – cannot be appreciated without understanding the entirely state-collectivized economy that existed at the time. Collectivization assured full employment and the near universal provision of primary health care and basic education in both rural and urban areas.

That particular revolutionary setting would be near impossible, and perhaps not desirable, to reproduce today. But we can still learn from the underlying principles, shared with other less extreme cases, in terms of the ways off-farm employment was generated and supported by domestically controlled mechanisms of accumulation, wealth redistribution, and universal social service provision – all pursued from a poor agrarian economic starting point. Even countries that have made good progress in their fertility transitions, such as most of Asia and Latin America, urgently require employment-focused development strategies in order to successfully tap the potential of their so-called 'demographic dividend', a one-off historical peak in the proportion of working-age adults to young and old dependents.

These lessons should be clear both for the progressive development community, that wishes to make poverty history, as well as for the rising xenophobic Right in Europe and the United States that wishes to stem immigration and other perceived ills inherited from their legacy of having once plundered the non-Western world. Developmentalism, progressive redistribution and universalistic social policies, especially in health, need to be urgently placed at the top of the development agenda, or else we must expect increasing flows of immigration to right the imbalance. ■

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