

## Population change in the rural developing world: making the transition

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#### Key Messages

- For decades, those planning agricultural and rural development have had to assume further, often quite rapid, population growth in rural areas. Across much of East Asia, Southeast Asia and Latin America that is no longer the case. Rural populations are declining. Elsewhere growth is slowing. Fewer infants are being born today in rural areas than in the recent past.
- Both fertility and mortality have been falling in rural areas, converging from levels higher than urban areas towards urban levels.
- Most rural areas see net out-migration. Increased education of rural people is likely to encourage such moves, not stem them.
- Changing demography is first and foremost about women and girls. Lower fertility and less child mortality constitute a gentle revolution of women's empowerment.
- The proportion of the rural population in working years is rising, potentially delivering a 'demographic dividend' of faster economic growth.
- Labour shortages are emerging in some rural areas, pushing up rural wages, and encouraging mechanisation.
- Policies to reduce rural population growth include direct measures such as family planning, but also poverty reduction, health improvements and schooling for girls can play a major role.
- For rural areas facing labour shortages, facilitating transfers of rights to operate land are indicated.
- Policy to discourage migration tends to raise costs and dangers to migrants. Better would be to facilitate movement, making sure that migrants have good information and can transfer their rights as citizens from country to town.

### 1 Introduction

Rapid population growth, above all in the developing world marked the second half of the last century. World population rose from 3 billion in 1960 to an estimated 7.3 billion by the end of 2015. The vast bulk of the increase, more than 4 billion additional persons, was seen in the developing world.

Population growth is, however, slowing. The world is seeing the tail of the second great demographic transition seen in modern history. The first began in the late 1700s in the early industrialising countries and was largely completed by 1950. The transition saw both rates of mortality and fertility fall, but with the latter lagging behind the former so that during the transition birth rates considerably exceeded death rates, producing a spurt of rapid population growth. The second demographic transition started after the Second World War in the developing world. In some parts of the developing world, most notably across much of East and Southeast Asia and Latin America, the transition is complete, but in other developing countries it still has some way to run so that populations continue to grow relatively quickly.

While population change in the developing world is most evident in the growth of cities and towns, demographic changes are just as marked in rural areas. For decades, those interested in agricultural and rural development have taken as given that rural populations are growing, often rapidly; implying that agricultural output will have to grow even more rapidly, while pressure on natural resources mounts from an ever larger rural population. That pressure may be relieved by migration from country to town, but this is commonly thought to lead to overly-rapid urbanisation marked by the profusion of slums.

But those understandings are becoming out-dated as the demographic transition proceeds. We have thus reviewed population in rural areas of the developing world to identify patterns of change, the drivers of these changes, and to assess what this may mean for policy for agricultural and rural development.

Secondary sources have been used to answer these questions, drawing on published studies as well as statistics compiled in censuses and demographic and health surveys. To explore changes at country level, sixteen relatively populous developing countries were selected to represent their regions: for Asia, Bangladesh, China, India, Indonesia and Vietnam; for the Middle East and North Africa, Egypt, Iran and Morocco; for Latin America, Brazil, Costa Rica, Mexico and Peru; and for sub-Saharan Africa, Ethiopia, Ghana, Kenya and Senegal.

A simple framework was adopted, following McFalls (2007), that states that rural populations change as people are added through fertility, subtracted through mortality, and move through migration.

### Rural areas differ demographically from urban areas in developing countries in four ways:

- Mortality tends to be higher in rural than urban areas, largely owing to high mortality of children under age five. This stems from many rural households having lower incomes, poorer nutrition, less clean water and sanitation, and fewer medical services than their urban counterparts. This comparison, however, may only be valid at the mean: informal urban settlements often suffer all the health disadvantages that rural areas experience, and sometimes worse;
- Fertility in rural areas also tends to be higher than in urban areas. That again may be a function of lower incomes; but may also be associated with agriculture, since it is easier for mothers to combine child-raising with farm work compared to say, working in a factory and the children can help on the farm from an early age;
- The combination of higher mortality and fertility delays the demographic transition in rural areas so that rates of natural population growth in rural areas are usually higher than those in urban areas; and,
- Most rural areas experience out-migration to urban areas, so that the
  population of cities grows faster than the rural population, despite the
  underlying more rapid increases in rural areas.

# 2 How is rural population in the developing world changing?

The world is becoming less rural. Not only was the point at which more than 50% of the world's population is urban passed in 2007, but it is expected that between 2015 and 2030 the world's rural population will peak, at about 3.3 billion, and then decline. The developing world still remains, however, more rural than urban, albeit narrowly so (see Figure A). Urbanisation has risen from 20% in 1960 to 46% in 2014.

Figure A: Rural and urban population, developing world, 1950 to 2014

Source: World Development Indicators

Even where rural population is not yet falling, it will soon. Infant cohorts, aged 0 to four years, in rural populations are already in decline in 13 of the 16 countries studied, so that given time the rural population must fall. The three exceptions come from sub-Saharan Africa.

Fertility rates, the estimated number of live births to the average woman during her reproductive years, fell across the world between 1961 and 2013: rates halved, falling from just over five to less than 2.5. Rural fertility tends to be higher than urban, typically by about 1.5 children per woman in childbearing years. Most rural fertility rates in the developing world have been declining over the last three decades, with only a few exceptions (Figure B).

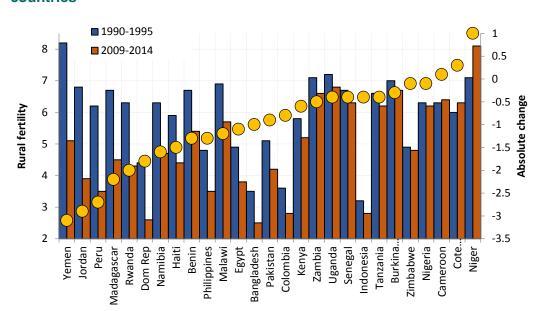


Figure B: Changes in rural fertility rates, 1990–1995 to 2009–2014, 27 countries

Fertility has been falling for multiple reasons: increased child survival that means fewer births are needed to ensure the number of surviving children desired; economic growth that rewards those who are skilled and educated; female education that opens doors to formal work for women and increases the cost of child bearing and raising; exposure to mass media that often portray successful people with small families; and family planning services. Most of these factors and trends will probably continue in the future, so they should drive further falls in fertility.

Mortality of infants in rural areas has also been falling, converging towards urban levels. Regional differences within countries have also been reduced: rural mortality has fallen faster in less prosperous and remote regions than in the more favoured areas.

Migration from rural areas is difficult to measure, since many moves are seasonal, temporary or cyclical, but most rural areas see net out-migration. Much movement responds to a combination of opportunity, the skills and education of the migrant, and social networks that span town and country. Distress migration captures the headlines, but most migration is undertaken in hope rather than desperation. Successful rural development, whereby rural people gain skills and capacity, and get more information on distant opportunities, is thus as likely to raise out-migration as it is to stem it.

Without migration out of rural areas, the higher natural rates of population growth in rural areas would tend to ruralise, rather than urbanise countries: migration is thus necessary for urbanisation. Without urbanisation, in economic growth would in most cases be reduced.

### 3 The wider picture

Three overall points emerge from this study. One is that changing demography is first and foremost about women and girls. Lower infant and child mortality, lower maternal mortality, later marriages and longer intervals between births improve women's health and wellbeing. They also allow women, when combined with girls' schooling, more scope to seek jobs, to migrate, and to gain income, status and autonomy. Even when women stay at home, lower fertility reduces time spent on raising children and on domestic chores, allowing women a better balance between their reproductive roles and other aspects of their lives.

A gentle revolution may be underway: one from which the daughters and granddaughters of the current generation of mothers will hopefully continue to benefit. Closely associated with this are improved survival of children with less morbidity and better nutrition: another gentle revolution.

Second, as rural population growth slows and eventually declines, dependency ratios – of young and old to those in working age – fall in rural areas. Even allowing for migration removing part of the working-age population, census data clearly show falling dependency ratios. A 'demographic dividend', with more people in their active working years, is being delivered. Potentially this can lead to more output, consumption, savings and investment. With women less occupied with child bearing and rearing, there may also be a gender dividend as well.

Third, as rural population starts to fall, labour shortages are likely in agriculture, particularly at peak periods such as planting and harvest. That may lead to some mechanisation of operations, as seen in the emergence of a thriving rental market for farm machinery in China.

Labour shortages, however, are likely to have an even more important effect: wages for unskilled labour in rural areas will be bid up. Rural wages are rising in many Asian countries, in some cases with signs that the increases have accelerated since the mid-2000s.

With less labour in agriculture and more machinery, the advantage of (very) small-scale cultivation for labour supervision will be undercut, thereby making larger-scale farming economically attractive. Since optimal scale is unlikely to exceed the area that can be managed by the family with the help of rented machinery, this does not mean in the near future a move to large farms, but rather a shift to some family farms expanding their operations, for instance from two to 10 hectares. The stage will thus be set for consolidation of land operations – although not necessarily ownership – in the hands of a smaller group of households specialised in farming.

### 4 Policy implications

There is much to be said for reducing fertility and slowing population growth; at very least helping women to match their actual to their desired number of births, gaps that typically run at one to two births a mother.

Direct measures include influencing preferences for family size through messages ranging from advice given in public health services to writing them into the plot lines of soap operas. Regulations to ban child marriage are another.

Family planning can be cost-effective, since costs are more than offset by savings in services for infants that were never born, while stemming unwanted pregnancies saves young mothers' lives. In the past, family planning has been tainted by association with coercive population control through forced sterilisation or one-child rules. Such draconian policies not only are objectionable, but also most evidence shows they have not been that effective. The most effective family planning services have been those that deliver services in villages to mothers, preferably through local women, linked to other health measures. Thailand's programme is an exemplar.

Indirectly, policies that reduce poverty, above all through better education, and particularly for girls, can lower fertility. Indeed, measures that raise women's status and allow them to realise their potential through education and skills – ranging from controls on early marriage, women's inclusion in workplaces, action to reduce violence against women, equal rights, and gender-sensitive social protection – will usually lead to high fertility being reduced towards replacement levels. Better health care that cuts premature deaths of young children and mothers is also likely to reduce fertility.

As rural populations fall, policies to facilitate land transfer to specialised farmers may be useful. Although (local) markets may move land from part-time to full-time farmers, these may work better when informal rights to land are registered and officially recognised. Land transfers are not necessarily about changing ownership: what matters is the right to operate the land, allowing households that no longer farm full-time to retain ownership of their land. Occasionally, where holdings have become highly fragmented, programmes to consolidate holdings may help to create fields that can be worked more effectively by machinery.

For migration, attempts to restrict movement have usually done little to stem migration, but rather have raised costs and dangers to migrants. Better policy would seek to facilitate rural household choices by: providing better information on opportunities at destinations; reducing the cost of sending remittances; protecting the rights of migrants as workers and in accessing services (simple identity cards can make a difference); and by developing rural financial services that could avert migration undertaken to accumulate capital for investment back in the village.

### References

This Briefing Paper is based on:

Sharada Keats and Steve Wiggins (2016) 'Population change in the rural developing world: making the transition', London: Overseas Development Institute.

The full report can be downloaded here:

 $\underline{\text{https://www.odi.org/publications/10366-population-change-rural-developing-world-making-transition}$ 



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