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# POPULATION DYNAMICS AND THE SUSTAINABLE DEVELOPMENT GOALS

A report by the UK All-Party Parliamentary  
Group on Population, Development and  
Reproductive Health

July 2015



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*Front Cover Picture*

*Would-be immigrants are pictured in a dinghy after being rescued in the sea near Italy's southern island of Lampedusa on August 28, 2008. Seventy would-be illegal African immigrants to Europe perished when their boat sank in the Mediterranean Sea, according to eight companions rescued off Malta*

*Photo: Mauro Seminara/AFP/Getty Images*

## **The UK All-Party Parliamentary Group on Population, Development and Reproductive Health**

The UK All-Party Parliamentary Group on Population, Development and Reproductive Health is a cross-party platform for Peers and MPs. Its purpose is to raise awareness on key development and rights issues, with a specific focus on population and sexual and reproductive health and rights. The group was established in 1979 and is one of the oldest All-Party Parliamentary Groups in Westminster. It has more than 80 members with representation from all major political parties, and from both Houses in the UK Parliament.

### **Acknowledgements**

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## List of acronyms

GDP	Gross domestic product
HIV	Human immunodeficiency virus
ICPD	International Conference on Population and Development
IPPF	International Planned Parenthood Federation
UK	United Kingdom
UN	United Nations
UNFPA	United Nations Population Fund
USA	United States of America

**Demographic dividend**, as defined by the UNFPA means, “the economic growth potential that can result from shifts in a population’s age structure, mainly when the share of the working-age population (15 to 64) is larger than the non-working-age share of the population (14 and younger, and 65 and older).” A country with both increasing numbers of young people and declining fertility has the potential to reap a demographic dividend.

# Foreword



*Baroness Jenny Tonge  
Chair, UK All-Party Parliamentary  
Group on Population, Development,  
and Reproductive Health*

It is often all too easy to forget that I work in the centre of a great global metropolis; a city that blends the cultures, faiths and nationalities of 8.6 million people. By 2030 London is likely to have joined a growing list of cities with more than 10 million inhabitants. We will all have to adjust to its “megacity” status while coping with the effects of climate change.

Like London, the world is now reacting to some of the most challenging conditions in human history. The consequences of climate change are already being felt in many regions that have to cope with floods and droughts. Cities are growing in number and size, and governments are struggling to manage the hopes and expectations of 1.8 billion young people. More and more people are living on flood plains and in coastal areas, while migrants fleeing violence or chasing a better life are cast adrift at sea; left to be rescued, or to wash up on a beach.

Population is all too often ostracised in international development; it is seen by some as a relic of the 20th century’s population control programmes. But if we are to cope with current and future challenges and achieve sustainable development, then funding and policies must be grounded in an understanding of population dynamics: population size, trends, age structure, migration and urbanisation.

For governments in countries with young and growing populations, and rapid urbanisation, my message is one of opportunity. Invest in family planning and the wider sexual and reproductive health and rights agenda, invest in education and health care, and invest in infrastructure and job creation. The demographic dividend is achievable.

For governments in countries that consume the most resources, and that face aging and shrinking populations, my message is one of caution. Reduce consumption and promote sustainable economic models before it is too late. We must not leave future generations to bear the costs of our profligate lifestyles.

My message to everyone is that an understanding of population dynamics should be at the heart of everything we do in development.

# Executive summary

The soon-to-expire Millennium Development Goals have guided international development for 15 years. In 2007, the UK All-Party Parliamentary Group on Population, Development and Reproductive Health published a report, *Return of the Population Growth Factor: Its Impact upon the Millennium Development Goals*. The report examined the impact of population growth on the Millennium Development Goals and targets and found that some would be difficult or impossible to achieve. Now, in 2015, we know that many of the Millennium Development Goals and targets have not been achieved, and the planned follow-up framework, the Sustainable Development Goals, may suffer similar pitfalls.

The UK All-Party Parliamentary Group on Population, Development and Reproductive Health decided to host a series of parliamentary Hearings to draw attention to the role of population dynamics in achieving sustainable development, and its interplay with climate change and with conflict. The Hearings called for evidence from governmental and non-governmental organisations, institutions and individuals. This report and its recommendations are based on the evidence submitted to the Hearings.

By 2030, there will be an additional one billion people in the world. Many countries face the challenge of productively engaging large populations of young people to achieve a demographic dividend. Others will need to adjust to aging populations. Migration is expected to increase within and between countries, and there will be an additional one billion people living in urban areas by 2030. Each of these population dynamics will create challenges for the provision of basic resources and services, and for the pursuit of inclusive economic growth and social development.

Climate change will increase the risk of extreme weather events such as droughts and flooding, and the extent of climate change must be mitigated by immediate reductions in carbon emissions, particularly in developed countries and emerging economies. The effects of climate change are likely to exacerbate shortages of resources in some regions and strengthen pressures that lead to migration. The biggest increases in the number of people at risk of extreme weather events will occur in sub-Saharan Africa and South Asia due to population growth and migration patterns.

Migration and urbanisation offer opportunities to alleviate the impact of climate change for communities in regions worst affected by climate change. With the right policies, cities can be productive and efficient centres of growth, and rural-to-urban migrants provide an important labour force. Investment in resilient infrastructure will be needed to protect urban areas, particularly those in coastal areas and on flood plains, from the effects of climate change.

Inappropriate policies and poorly planned migration and urbanisation act to reinforce social exclusion and undermine security. In settings with limited opportunities for education and employment, large populations of young men can be a risk to security. In settings with limited protection for migrant workers, young people suffer inhumane working conditions, poor health and sexual violence.



*Sir Richard Ottaway  
Inquiry Chairman and Vice-Chairman,  
UK All-Party Parliamentary Group  
on Population, Development and  
Reproductive Health*

The Sahel region in Africa will face some of the most acute challenges in coming decades due to population growth, climate change and conflict. Countries in the region already struggle to maintain security and meet the needs of their populations, and many of the migrants attempting to cross the Mediterranean have come from the Sahel. The region accounts for a growing proportion of the world's population and as a result the Sahel will have an increasingly important role in meeting the Sustainable Development Goals.

Many countries will have the opportunity in coming decades to benefit from a demographic dividend. Such opportunities will only be realised with investment in family planning and the wider sexual and reproductive health and rights agenda, and concurrent investments in education, health, employment and urban infrastructure. Universal access to modern contraception and sexual and reproductive health services would lead to US\$120 in economic benefits for each US\$1 spent. The cost of inaction will be missed opportunities for economic and social gains, and ultimately, failure to achieve sustainable development.



*UK parliamentarians attending the International Parliamentarians' Conference on the Implementation of the ICPD Programme of Action, Stockholm, 2014  
Photo: European Parliamentary Forum on Population and Development*

## Summary of recommendations

1. Increase funding for family planning and the wider sexual and reproductive health agenda to 10% of official development assistance and 10% of national development budgets.
2. The Sustainable Development Goals and targets must not be renegotiated. The draft framework contains goals on healthy lives and gender equality and targets on sexual and reproductive health and reproductive rights, including family planning. It is imperative that these goals and targets are subsequently translated and included in all national development plans and accompanying budgets.
3. Advocate for Sustainable Development Goal indicators at global and national levels that are reliable and comparable, measure progress in achieving universal access to family planning and the sexual and reproductive health and rights agenda, as listed in the full recommendations. These indicators must be disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.
4. Urgently press for further commitments to reduce resource consumption and carbon emissions, and support investment in low-carbon forms of development.
5. Amend the UK International Development Act 2002 to mandate the Secretary of State to consider the impact of development assistance on population dynamics, and vice versa.
6. Utilise the economic arguments presented in this report to support governments, and finance ministries in particular, to develop appropriate laws, policies and investments that promote universal access to family planning and the wider sexual and reproductive health agenda.
7. Legislate and develop policies and programmes to prevent and address gender-based violence and invest in long-term planning capabilities with better quality data on population dynamics, contraceptive prevalence and unmet need for family planning.
8. Support and invest in secondary education for girls to promote gender equality and empower women.
9. Champion universal access to health care and remove unnecessary barriers, particularly for young people and migrant workers.
10. Work with conflict, humanitarian, security and climate change groups to promote a holistic approach to sustainable development that ensures universal access to family planning and sexual and reproductive health and rights.



## Background: Population and sustainable development

In 2007, the UK All-Party Parliamentary Group on Population, Development and Reproductive Health published a report *Return of the Population Growth Factor: Its Impact upon the Millennium Development Goals*, and an update to the report was published in 2009. The report noted that despite targets to halve extreme poverty, population growth contributed to an increase in the number of people living in extreme poverty in some regions. The report suggested that the Millennium Development Goals would be 'difficult or impossible to achieve with the current levels of population growth in the least developed countries and regions.'(page 4)



Family planning methods in an International Planned Parenthood Federation (IPPF)  
Photo: Sarah Shaw, IPPF

Now, in 2015, it is clear that progress towards the Millennium Development Goals has been mixed. At a global level, the proportion of people living in extreme poverty has halved, as has the proportion of people living without access to clean water, and important progress has been made to reduce maternal mortality (United Nations, 2014). However, health inequalities between and within countries are increasing, as are the specific needs of the world's young people.

In September 2015 world leaders will meet in New York to agree and make a commitment to a new set of goals, targets and indicators that will guide development for the coming 15 years: the Sustainable Development Goals. These goals, which will apply to developing and developed countries, will focus on achieving inclusive economic growth, social development and environmental stewardship.

The UN Synthesis Report of the Secretary-General on the Post-2015 Agenda, building on the work of the Open Working Group on Sustainable Development Goals and other preparatory processes, proposed a set of 17 goals:



1. End poverty in all its forms everywhere
  2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
  3. Ensure healthy lives and promote wellbeing for all at all ages
  4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
  5. Achieve gender equality and empower all women and girls
  6. Ensure availability and sustainable management of water and sanitation for all
  7. Ensure access to affordable, reliable, sustainable and modern energy for all
  8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
  9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation
  10. Reduce inequality within and among countries
  11. Make cities and human settlements inclusive, safe, resilient and sustainable
  12. Ensure sustainable consumption and production patterns
  13. Take urgent action to combat climate change and its impacts
  14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
  15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
  16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
  17. Strengthen the means of implementation and revitalise the global partnership for sustainable development
-



*Railway staff squeezing commuters onto a train in Honshu, Tokyo, Japan,  
Photo: Paul Chesley/The Image Bank/Getty Images*

In 2013, 50 countries endorsed the Dhaka Declaration at a Global Leadership Meeting (Government of Bangladesh and Government of Switzerland, 2013). The Declaration urged countries to ‘address and integrate population dynamics into the post-2015 development agenda’(page 1 para 3) and encouraged ‘local authorities, governments and inter-governmental agencies/organisations to take population dynamics into account while formulating rural, urban, national and global development strategies and programmes.’(page 1 para 6)

This report examines the role of population dynamics to support policy-makers in the run up to, and following, Sustainable Development Goal negotiations. The report brings together evidence on the interplay between population dynamics (in terms of population size, age, migration and urbanisation) and two key determinants of sustainable development: climate change and conflict.



*Urban slums in Mumbai  
Photo: John Wang/Getty Images*

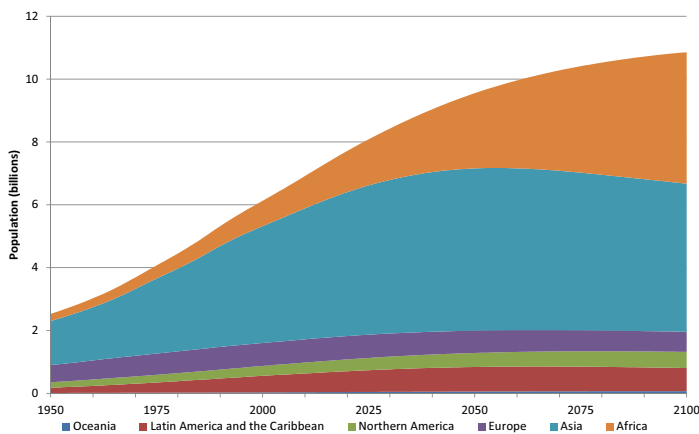
*'New demographic trends are changing our world. We are already a global family of 7 billion people and are likely to reach nine billion by 2050. We are an ageing world, as people live longer and healthier lives. We are increasingly an urban world, with more than half the world's population living in towns and cities. And we are a mobile world, with more than 232 million international migrants – and almost one billion when internal migrants are counted. These trends will have direct impacts on our goals and present both challenges and opportunities.'*

*(UN Synthesis Report of the Secretary-General on the Post-2015 Agenda, 2014)*

# Population dynamics in the past, present and future

By 2030 there are likely to be an additional 1 billion people in the world, which will mean a global population of more than 8 billion people (Figure 1). Population sizes in many countries in Europe and Asia are expected to stay level or fall in the coming 15 years. Much of the population growth is expected to occur in countries in South Asia and in sub-Saharan Africa, particularly in populous countries where fertility remains relatively high, for example Pakistan, Nigeria and the northern states of India.

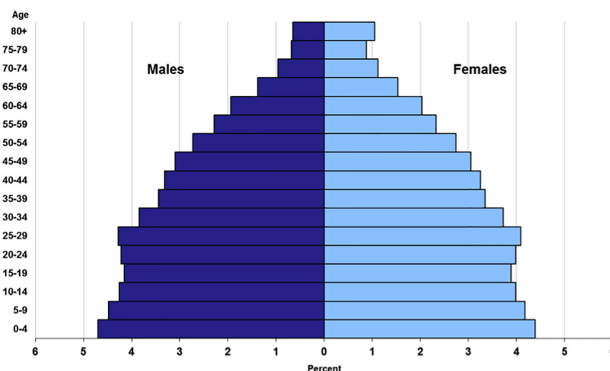
Figure 1. Total world population, by region



Source: Based on data from UN Population Division (2013a), medium variant

The term demographic transition has been used to refer to a progression towards fewer births, fewer deaths and higher average ages. The global (median) average age increased from 24 years to 30 years between 1950 and 2013, and is expected to reach 33 years by 2030 (UN Population Division, 2013a, medium variant). Yet there are 1.8 billion young people (aged 10 – 24 years) worldwide and almost 1 billion people aged over 60 (UNFPA, 2014).

Figure 2. World population by age and sex, 2015



Source: Based on data from UN Population Division (2013a)

By 2030 there will be an estimated 1.4 billion people living in sub-Saharan Africa and the region’s average age will be just 20 years. One of the most pressing challenges for African countries will be the adoption of appropriate policies to support family planning and the wider sexual and reproductive health and rights agenda, education and employment, especially for young people, in order to replicate the recent demographic dividend and rapid economic growth of Asian countries (World Bank, 2014) .

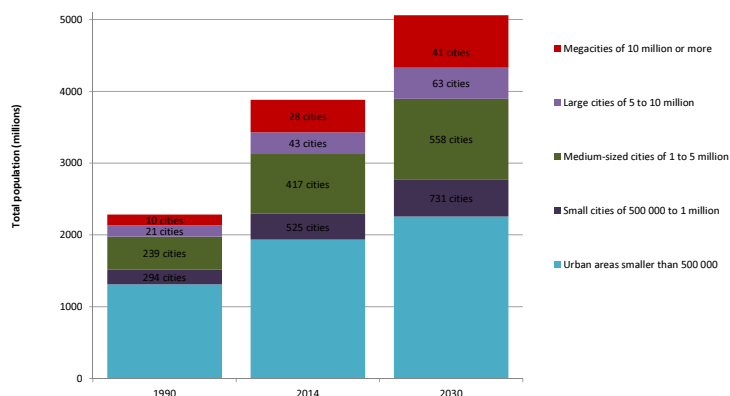
### Population projections beyond 2030

Projections beyond 2030 are imprecise and highly contested. The UN Population Division’s 2012 Revision projected the world’s population in 2100 would be somewhere amidst three sets of estimates: 6.8 billion (low variant), 10.9 billion (medium variant) and 16.6 billion (high variant). A more recent set of estimates indicated with 80% certainty that the world’s population will be between 9.6 billion and 12.3 billion in 2100. UN projections assume decreases in fertility throughout the 21st century, however such decreases are not assured and will rely on greater investment in family planning and support for sexual and reproductive health and rights.

The world is undergoing substantial urbanisation as more people live in cities. The number of people living in urban areas increased from 2.3 billion in 1990 to 3.9 billion in 2014, and the number of people living in slums increased from 650 million to 863 million (UN Population Division, 2014b). By 2030, 5 billion people are expected to be living in urban areas (Figure 3). There will be more cities and the number of megacities (which have a population of more than 10 million people) are expected to increase from 28 to 41. By 2030, 9% of the world’s population are expected to live in these 41 megacities.

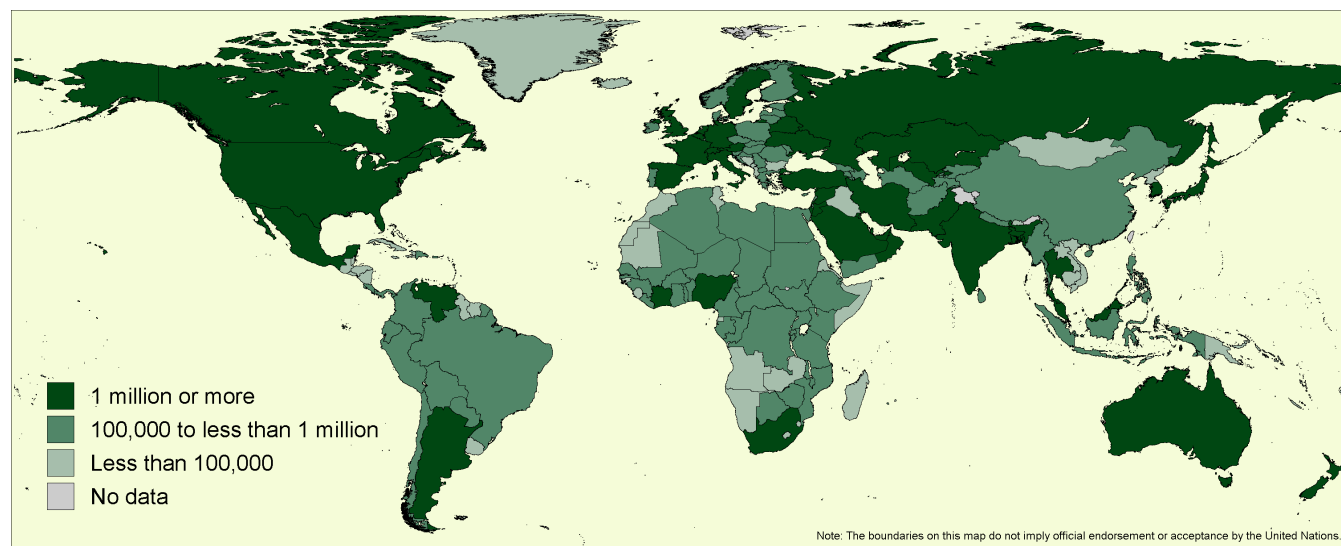
Conflict, environmental degradation, human trafficking, disparities between countries and the desire for economic and social opportunity

Figure 3. Urban growth and projections by city size



Source: Based on data from UN Population Division (2014)

Figure 4. International migrants by country of destination



Source: Based on data from UN Population Division (2013b)

have led to increased migration. In 2000, 175 million people lived outside their country of origin (Figure 4). By 2013 this stood at 232 million people. Of these migrants, 35% moved from one developing country to another, while 34% moved from developing to developed countries (Population and Sustainability Network and the Population and Sustainable Development Alliance, written evidence).

The UN has estimated that there will be 60 million environmental migrants by 2020, and 200 million by 2050 (UN Convention to Combat Desertification, 2014). Written evidence by the Population and Sustainability Network and the Population and Sustainable Development Alliance emphasised that such figures should be interpreted with caution as the true number of migrants is extremely difficult to predict. However, it is highly likely that the second half of the 21st century will see unprecedented levels of migration, including hundreds of millions of migrants fleeing climate change, and at the time of writing there is already a growing crisis of refugees attempting to cross the Mediterranean from Africa to Europe.



*'It is predicted that by 2030 the world will need to produce around 50% more food and energy, together with 30% more fresh water, whilst mitigating and adapting to climate change. This threatens to create a 'perfect storm' of global events...There's not going to be a complete collapse, but things will start getting really worrying if we don't tackle these problems.'*

*(Professor Sir John Beddington, former UK Chief Scientific Advisor, 2013)*

## Population dynamics and climate change

Humans have caused, and are causing, climate change and there is a consensus that, without urgent action, global temperatures will rise throughout the 21st century. Expert witnesses noted that the world's temperature will increase 2 to 3 degrees Celsius by the end of the century due to existing levels of greenhouse gases in the atmosphere alone. Additional emissions in coming decades will increase the average temperature further.

By 2030 the world is likely to be between 0.5 and 1 degrees Celsius hotter on average than at present, and rainfall will be more unpredictable, resulting in droughts and flooding. Among developing countries that have drafted National Adaptation Programmes of Action, 93% identified population growth and density as key challenges for adapting to climate change, although only one cited voluntary family planning as a policy relevant to climate adaptation (Population and Sustainability Network, and the Population and Sustainable Development Alliance, written evidence).

### Population dynamics, climate change and the Sustainable Development Goals

Proposed Sustainable Development Goals 1 and 2 aim to end poverty and hunger yet the number of people living in poverty is increasing fastest in regions that are already vulnerable to droughts and famines, and these regions will become increasingly vulnerable as climate change unfolds. Proposed goals 6, 7 and 8 aim to ensure universal access to clean water and sanitation, energy and full employment. Again, these goals will be most difficult to achieve in regions that already have the largest gaps in water availability, energy production and full employment. Proposed Goal 12 aims to ensure sustainable consumption and production, which will be impossible to achieve if populations and resource consumption continue to grow and to outstrip supply. The expected impact of climate change will exacerbate all these challenges.

Proposed Sustainable Development Goal 9 aims to build resilient infrastructure, and Goal 11 aims to make cities and settlements safe, resilient and sustainable. The largest increases in populations living at risk of extreme weather events are expected to take place in South Asia and in sub-Saharan Africa. These are regions which, at present, are least capable of making investments in resilient infrastructure.

The effects of climate change are likely to exacerbate shortages of resources, including land. Low-lying countries and those bordering deserts are at particular risk. Bangladesh, for example, is likely to face increased flooding as a result of rising sea levels. This will have implications for the amount of habitable land and areas suitable for agriculture. Evidence submitted by Population Matters stressed that in a world with finite resources, a growing population means that there is less available for each person. At the time of writing, Sao Paulo state (Brazil) and California (USA) are suffering the worst droughts in living memory.

These are areas which have experienced large and rapid population growth and migration in recent decades.

Research by Futures Group and by Lund University has indicated that increased access to family planning may offset some of the impact of climate change on food insecurity. Fewer people would mean lower total requirements for food. The research suggests that young children in particular would benefit as they are most vulnerable to food shortages. Expert witnesses noted that investment in voluntary family planning needs to be linked to other variables, particularly greater educational opportunity for girls. Investment in family planning is a strategy that is synergistic with other efforts to adapt or mitigate climate change.

**Figure 5. Unmet need for family planning (% of currently married women)**



Source: World Bank (2012)

Note. EAP denotes East Asia and Pacific, ECA Europe and Central Asia, LAC Latin America and the Caribbean, MNA Middle-East and North Africa, SAR South Asia and SSA sub-Saharan Africa

Consumption of resources in developed countries has been a key driver of climate change. The Intergovernmental Panel on Climate Change (IPCC) has highlighted the role of population growth (alongside economic growth) in carbon emissions. Changes in lifestyle and diet, such as increased car ownership and consumption of meat (and in particular red meat), have played an important and growing role in



Cattle are a major source of global methane emissions  
Photo: Claus Kjaerby

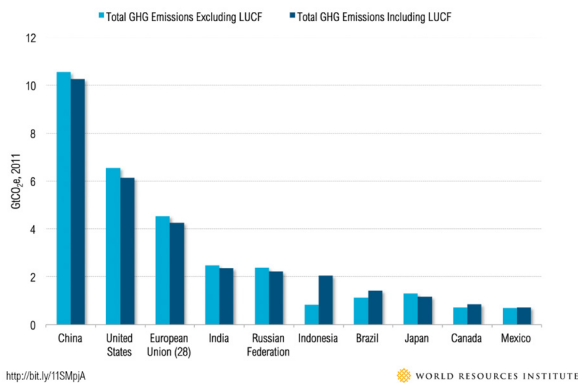


Traffic on Bay Bridge, San Francisco  
 Photo: Bob Peterson/UpperCut Images/Getty Images

carbon emissions. A meat-rich diet (of more than 100g of meat per day) is associated with twice as much carbon emissions as a vegetarian diet, and livestock contribute 20% of greenhouse gas emissions (Eshel et al., 2014).

There is a consensus that there is an urgent need to reduce consumption in developed countries as a short- to medium-term solution to reduce carbon emissions. Many pregnancies worldwide are unplanned, and making family planning accessible would be a highly cost-effective way to mitigate human-induced climate change (IPPF, written evidence). Urgent investment is needed to promote the long-term benefits of population stabilisation and low-carbon approaches to development.

Figure 6. Top ten carbon dioxide emitters



Source: World Resources Institute  
 Note: GtCO<sub>2</sub>e denotes gigatonnes of carbon dioxide, GHG denotes greenhouse gas, LUCF denotes land-use change and forestry

## Climate change and urbanisation

Expert witnesses noted that cities can be productive and efficient centres of economic growth. Developed countries and emerging economies such as China have relied on urbanisation for economic growth (see Box 2), as urban centres are better placed to support service industries and manufacturing. Cities offer opportunities for economies of scale in the use of resources and provision of services. Housing, transport and utilities can be provided more efficiently than sparsely populated rural areas. There is growing interest in cities such as Malmö, Sweden, that have reduced consumption and greenhouse gas emissions and promoted environmental conservation (The Royal Society, 2014). Malmö aims to run entirely on renewable energy by 2030.

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### Urbanisation and China's economic growth

China is often highlighted as an important example of rapid, urban-led economic growth. China's success, along with its large population, has been an important factor behind global progress towards the Millennium Development Goals. The Chinese government encouraged the creation of large urban centres of manufacturing, invested heavily in infrastructure and promoted migration of people from rural areas. Yet, as noted by written evidence, migrant workers had very few employment rights and poor working conditions. The 'hukou' registration system in China was highlighted as a damaging attempt to limit permanent urban migration among poor workers from rural areas. China's success has also carried a well-publicised environmental cost. High levels of air and water pollution are damaging ecosystems and respiratory conditions are a major cause of ill-health. Smog is estimated to have reduced average life expectancy in Beijing by 15 years (Guo et al., 2013).

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Expert witnesses noted that urban areas typically perform better in terms of development indicators. On average, access to family planning and skilled birth attendance is higher in urban areas and there are fewer incentives to have more children (UNFPA, written submission). Patterns are similar for enrolment in primary and secondary education. Economies of scale in health and education mean that urban centres are better placed to provide more specialised services and tertiary education.

Expert witnesses were keen to emphasise that development indicators in urban areas tend to mask disparities between different communities. Income, access to resources and access to services (such as health and education) vary widely. Research in Bangladesh indicated that skilled birth attendants were present at 50% of births among the wealthiest urban residents, but just 5% of births among the poorest urban residents (UNFPA, written evidence). This highlights the importance of disaggregating data by income. Written evidence from the Asian Forum of Parliamentarians on Population and Development emphasised a need to improve sexual health education in schools, particularly in slum areas.

**Figure 7. Current use of modern contraception – (% of currently married women)**

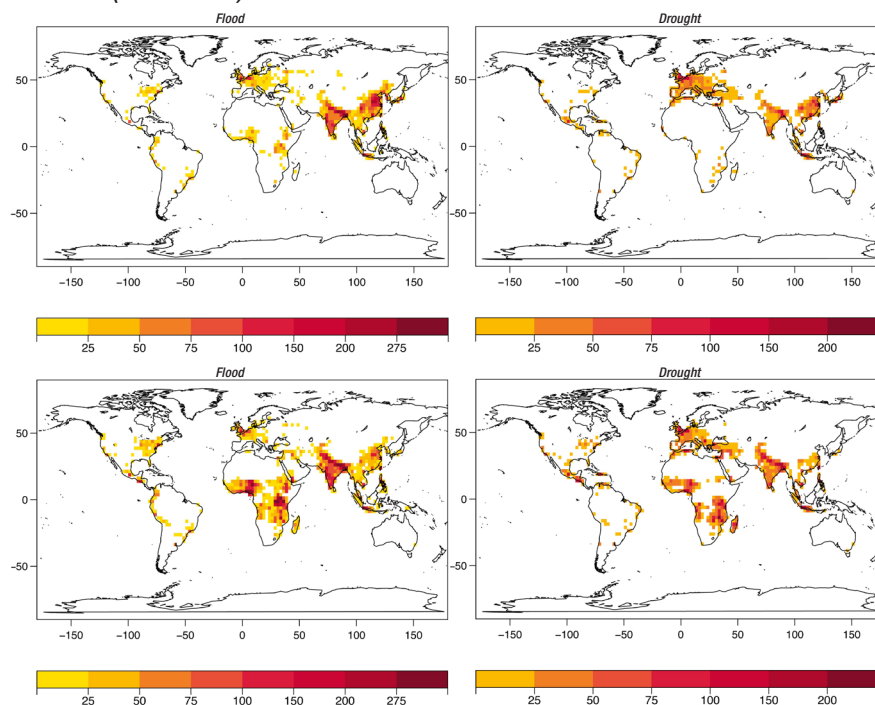


Source: World Bank (2012)

Note. EAP denotes East Asia and Pacific, ECA Europe and Central Asia, LAC Latin America and the Caribbean, MNA Middle-East and North Africa, SAR South Asia and SSA sub-Saharan Africa

The Royal Society’s *Resilience to Extreme Weather* report noted that as the 21st century progresses a growing number of people will be at risk of floods, heatwaves and droughts as population growth and climate change converge. For example, climate change is already likely to dramatically increase the number of people at risk of flooding in countries with stable populations such as those in Europe. Yet in countries with growing populations, millions more people will be living

**Figure 8. Risk of exposure to floods and droughts in 2010 (top row) and 2090 (bottom row)**



Source: The Royal Society (2014)



on floodplains in coming decades. Projections indicate that countries in South Asia and sub-Saharan Africa are likely to see the biggest increases in people at risk of flooding (see Figure 8).

The growing number of older people worldwide also creates challenges in extreme weather events. Evidence by Age International highlighted that the majority of those who died in Hurricane Katrina (USA, 2005) and the Tohoku earthquake and tsunami (Japan, 2011) were older people. The evidence noted that emergency nutrition programmes often focus on children and overlook vulnerable older groups. Evidence from the Royal Society noted that older people are highly vulnerable to heatwaves, which are expected to increase in frequency throughout much of the world in coming decades.



*A total of 64 people died in France as a result of a heatwave that gripped the country for most of July 2006. An old resident of the retirement centre in Lexouc takes a glass of water, 27 July 2006  
Photo: Thierry Zoccolan/AFP/Getty Images*

Attempts to promote resilience have included the Rockefeller Foundation's 100 Resilient Cities Project and the UK Department for International Development's Future Proofing Cities Project. Written evidence submitted by the Population and Sustainable Network and the Population and Sustainable Development Alliance highlighted the potential for effective urban planning to support developing countries to mitigate against the effects of climate change and to promote resilience.



*Two boys rest on sand bags placed at various points along the banks of the River Jamuna where it is vulnerable to erosion, Bangladesh  
Photo: G.M.B. Akash/Panos*



*The Thames Barrier, London, UK  
Photo: Skyscan/Corbis*

## Climate change and migration

Climate change plays an increasingly important role in global migration processes. Many people are being forced to move due to floods, scarcity of rainfall and failed harvests or a shortage of drinking water. The 2013 Dhaka Declaration highlighted migration as an important element of development and as an adaptation strategy in the face of climate change. The Declaration also noted that migrants must be protected from discrimination and violence and that their human rights should be upheld.



*A group of men travel on the back of a crowded auto rickshaw through flood waters that have inundated the Satkhira district, Bangladesh. Each year limited flooding helps to enrich the soil and create very fertile farm land. In turn, this results in a high population density on the flood plain. However, the low lying land is also prone to extreme flooding events that are very destructive to both economy and life  
Photo: G.M.B. Akash/Panos*

Poorly planned urbanisation and misguided policies can reinforce social exclusion. Insufficient housing capacity and bureaucratic requirements for buying or renting land have accompanied the emergence of slums and shanty towns. The residents of such areas may lack access to basic resources such as water and sanitation, and are particularly vulnerable to extreme weather events.

### Rural-to-urban migrants in Viet Nam

Research in Viet Nam has indicated that temporary and unregistered migrants account for approximately 10% of the population in Hanoi and Ho Chi Minh City (International Institute of Environment and Development, written evidence). These groups contribute two-thirds of the poor in the cities, work in the informal sector and move frequently within the city. As such they are typically overlooked by 'poor lists' that determine eligibility for social protection. The result of this is that migrants are unable to access education and health services, including family planning, and they are unable to exercise their sexual and reproductive health and rights.



Lack of social protection and poor access to health care creates substantial risks for migrants. Evidence from several expert witnesses highlighted the role of health care costs in pushing families into poverty. This is particularly important in settings where there are barriers to accessing health care and where a large proportion of the population lives in a precarious positions.

Research conducted in Middle Eastern and sub-Saharan African countries highlighted health problems faced by migrant workers, and their limited access to health services. Female Sri Lankan migrant workers in Middle Eastern countries suffer raised levels of health conditions such as hypertension, diabetes and stress due to high workloads, food deprivation and insufficient rest (Maya Unnithan and Sajida Ally, written evidence). 'Kafala' sponsorship systems in such countries leave domestic workers at increased risk of debt bondage and vulnerable to sexual abuse and rape. In Ghana, rural-to-urban migrants face losing their jobs if unable to work, even if they were injured while working (Joseph Assan, written evidence).



*Kashmiri flood victims receive free medicine during a medical camp organised by state doctors after the flood waters receded from the area on 18 September, 2014 in Srinagar, the summer capital of Kashmir, India. Nearly 100,000 people are still marooned in the areas of the Kashmir Valley submerged in flood waters. The floods in the Himalayan region of Kashmir were believed to be the worst in decades with over 200 dead. Health experts are worried the stagnant waters and floating carcasses of livestock could create conditions for serious outbreaks of disease*  
Photo: Yawar Nazir/Getty Images News/Getty Images

*'In developing countries, rapid population increase and urbanisation will probably challenge stability. Age and gender imbalances may exacerbate existing political and social tensions while a growing youth population, especially in the Middle East, Central Asia and sub-Saharan Africa, could provide a reservoir of disaffected young people. Conversely, if harnessed, they could provide a boost to their economies.'*

*(Strategic Trends Programme: Global Strategic Trends – Out to 2045, UK Ministry of Defence, 2014)*

## Population dynamics and conflict

Although conflict is often a result of political, religious and cultural differences, there is growing recognition of linkages between population dynamics (population size and age), access to education and employment, and conflict (CNA Military Advisory Board, 2014). There is significant overlap between countries with high fertility and those that are considered to be “fragile” states (see Table 1). At present, of the world’s 20 most fragile states, half were among the countries with the highest fertility in 1990. Eight countries still occupy the 20 most fragile states and have the world’s highest fertility rates. One explanation is that countries with high rates of population growth experience conflict as a result of reduced employment opportunities, marginalisation of communities, and dissatisfaction among young people (Medsin, written submission).

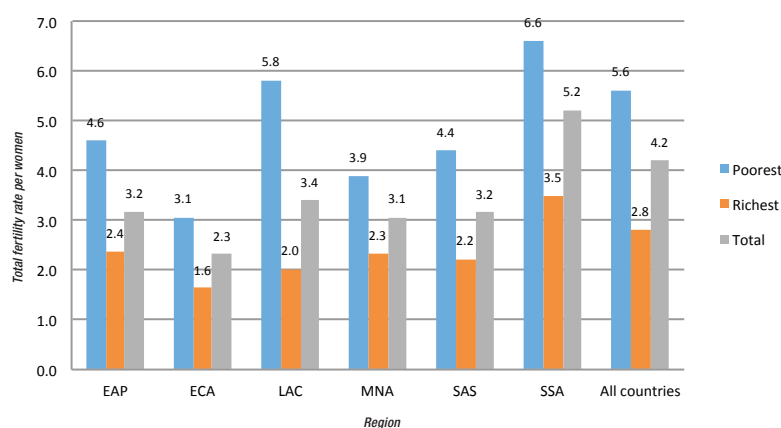


*UN Special Envoy and actress Angelina Jolie and British Foreign Secretary William Hague (L) attend the Global Summit To End Sexual Violence In Conflict on 11 June, 2014 in London  
Photo: Anadolu Agency/Getty Images*

### Population dynamics, conflict and the Sustainable Development Goals

Goal 11 aims to make cities and settlements safe however the experiences of young rural-to-urban migrants, particularly women and girls, indicate that they face sexual violence and require specific policies and programmes. Proposed Sustainable Development Goal 3 aims to ensure healthy lives and promote wellbeing for all at all ages. This goal cannot be achieved unless young rural-to-urban migrants are able to access health care including family planning and sexual and reproductive health and rights services. Education and employment (Goals 4 and 8) are needed alongside these specialised services, in order to promote security.

Figure 9. Total fertility rate (per woman)



Source: World Bank (2012)

Note. EAP denotes East Asia and Pacific, ECA Europe and Central Asia, LAC Latin America and the Caribbean, MNA Middle-East and North Africa, SAR South Asia and SSA sub-Saharan Africa

The incident of sexual violence increases when the rule of law breaks down in conflict settings, and families may encourage child marriage in the hope of protecting girls from sexual violence. Access to family planning and sexual and reproductive health services may be curtailed which further contributes to increased maternal mortality and morbidity. Policy-makers must be aware of the linkages between population dynamics and conflict and understand that meeting the unmet need for family planning will play an important role in preventing conflict and protecting livelihoods.

Table 1. Lists of 'fragile' and high fertility states (1990 and 2013)		
Countries ranked by Fragile States Index (2014)	Countries ranked in order of fertility (1990)	Countries ranked in order of fertility (2013)
South Sudan	Yemen	Niger
Somalia	Niger	Mali
Central African Republic	Afghanistan	Somalia
DR of Congo	Burundi	Chad
Sudan	Somalia	Burundi
Chad	Chad	Nigeria
Afghanistan	Rwanda	DR of Congo
Yemen	Ethiopia	Angola
Haiti	Angola	Uganda
Pakistan	Oman	Gambia
Zimbabwe	DR of Congo	Zambia
Guinea	Uganda	Burkina Faso
Iraq	Mali	Malawi
Ivory Coast	Burkina Faso	Timor-Leste
Syria	Malawi	Tanzania
Guinea-Bissau	South Sudan	Mozambique
Nigeria	Benin	Republic of Congo
Kenya	Guinea-Bissau	Afghanistan
Ethiopia	Senegal	South Sudan
Niger	Guinea	Guinea

Data from Fund for Peace and UN Population Division (2013a)



## Conflict and young people

Regions of the world are at different stages in the demographic transition and average age varies widely (see Table 2). Countries in Europe and North America have ageing populations and other regions (in particular Asia and South America) are catching up. Africa is the youngest region and is aging more slowly than the global average due to high fertility in many African countries.

<b>Region</b>	<b>Average age in 2015 (years)</b>	<b>Projected average age in 2030 (years)</b>
Africa	19.5	21.3
Asia	30.2	35.4
Europe	41.4	44.7
North America	37.9	39.8
Oceania	32.8	34.9
South America	29.9	35.0
<b>Global</b>	<b>29.6</b>	<b>33.2</b>

*Data from UN Population Division (2012 Revision). Projections to 2030 based on medium variant*

Evidence from Dr Richard Cincotta highlighted an association between average age and liberal democracy, and underscores the importance of investing in education and employment for young people. His research indicates that countries with an average age below 26 years are typically autocracies or have unstable democracies that revert to autocracy. Conversely, 80% of countries with an average age above 36 years are liberal democracies.

Recent “uprisings” in the Arab Spring are an example. Tunisia, with an average age of 31 years has (so far successfully) transitioned into a liberal democracy. Egypt, with an average age of 26 years, has not. Analyses of the causes of the Arab Spring have pointed to a variety of underlying issues, of which a large population of disenfranchised young people has been important. Similarly, written evidence by Professor Malcom Potts cited the findings of a report on the 2001 terrorist attacks in the USA which highlighted the role of ‘a large, steadily increasing population of young men without any reasonable expectation of suitable or steady employment’(page 54) in Afghanistan and Pakistan (National Commission on Terrorist Attacks upon the United States, 2004).

There are exceptions. There are conflicts and autocracies in countries with older populations, and there are peaceful liberal democracies with young populations (for example Ghana and South Africa). Yet it is clear that countries with a low average age remain particularly at risk of conflict and lapses into autocracy, and must devote political will to expanding access to education and employment.



*Soldiers of the Chadian army patrol on 21 January, 2015, at the border between Nigeria and Cameroon, some 40 km from Maltam, as part of a military contingent against the armed Islamist group Boko Haram. Chad, seen as having the most capable military in the region, sent a convoy of troops and 400 military vehicles into neighbouring Cameroon to battle Boko Haram on 17-18 January, 2015  
Photo: Ali Kaya/AFP/Getty Images*

## Population dynamics and fragile cities

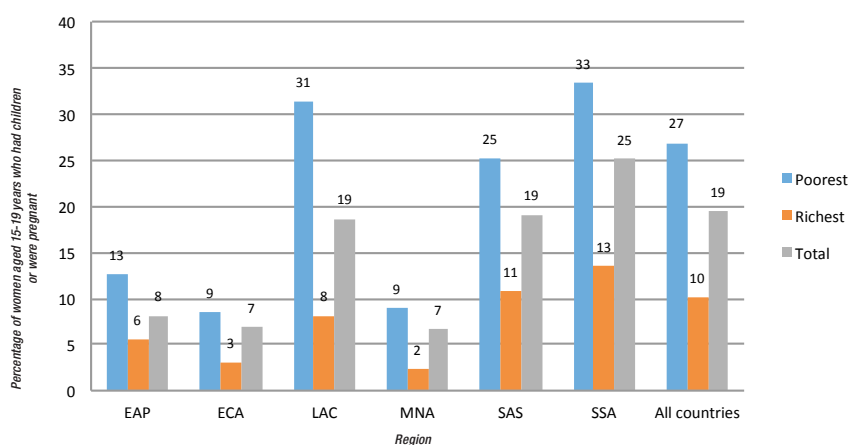
Urban areas are often densely populated and vulnerable to violence and unrest. In 2014 alone a range of events triggered riots in urban areas in Bosnia, Brazil, Jordan, Spain, Turkey, Ukraine and the USA.

Written evidence from Dr Robert Muggah described ‘fragile’ cities as a term for urban areas where governments fail to provide security and other services. He highlighted crime and violence associated with rapid urbanisation. Karachi is one much cited example. The city’s population doubled between 2000 and 2010, from 10 million to 20 million. It also has one of the highest murder rates in the world.

Large populations of young unemployed and under-educated men pose a particular risk to security in cities. Compared to any other group, such men are most likely to kill and to be killed. As noted earlier in this report, population growth and urban migration are causing rapid urbanisation in developing countries and many of these rural-to-urban migrants are young men. Evidence indicates that heavy-handed attempts to pacify slums are ineffective and may exacerbate violence. More effective measures include youth violence prevention services, job creation, and urban regeneration / programmes to improve streets and housing.

Projections for urbanisation indicate that almost all future growth will take place in countries in South Asia and Africa. These are also regions expected to experience the majority of the world’s population growth. Sustainable development in South Asia and Africa will therefore require substantial investment in tracking population trends, improved urban planning and better services for young people.

**Figure 10. Teenage pregnancy and motherhood (% of women aged 15-19 who had children or were pregnant)**



Source: World Bank (2012)

Note. EAP denotes East Asia and Pacific, ECA Europe and Central Asia, LAC Latin America and the Caribbean, MNA Middle-East and North Africa, SAR South Asia and SSA sub-Saharan Africa

## Migrants and sexual violence

One of the key themes among written evidence submitted to the hearings was the issue of sexual violence among young migrants, particularly in urban areas and in conflict settings. Expert witnesses emphasised that urban migration, which involves large numbers of young women and girls, is driven by a complex set of factors. In some settings poor development drives outward migration, while in other settings development increased the wealth of households which facilitated migration. Climate change is another driver of migration and its effects are already undermining food security in some settings, and this has been exacerbated by increased population sizes. Communities where land plots are divided among children face added challenges as larger families lead to shrinking land plots (Edward Morgan, written evidence).

Poor access to education and employment in rural areas was highlighted as a driver of migration. Another driver was the attraction of “city living”. The low status of women and girls was highlighted as a significant “push” factor for migration in some settings. For example, written evidence by Dr Priya Deshingkar and Professor L. Alan Winters, which reported research from Ethiopia, noted that many girls migrated to urban areas to escape child marriage. Written evidence noted that many young people (including those from wealthier families) understood the risks they faced in cities, but had moved to the city regardless.

Young rural-to-urban migrants often experience a gauntlet of exploitation and violence and many rely on the assistance of a third party to obtain accommodation and informal work. These were described in different settings using terms such as “guarantors”, “contact men” and “human traders”.

Yet written evidence based on research in Ghana and Ethiopia highlighted instances of sexual violence that migrants had to endure, particularly women and girls (Dr Joseph Assan, written evidence, Dr Priya Deshingkar, written evidence, and Marie Stopes International, written evidence). In some instances bus drivers, “contact men” and employers demanded sexual gratification in return for travel, accommodation and/or employment. In others, women and girls were raped during the night as they tried to sleep on pavements. Some women engaged in sex work for additional income.

Sexual violence, sex work and lack of access to family planning and sexual and reproductive health services places young rural-to-urban migrants at high risk of sexually transmitted infections such as HIV, and unplanned pregnancies. Policy-makers need to improve the available method mix for family planning, and remove unnecessary barriers to services including emergency contraception and safe abortion.



*Kayaye workers in Accra, Ghana  
Photo: Marie Stopes International*

*‘High fertility, rapid population growth and a large youth population present unique challenges in the Sahel. Where choices improve for women and girls, fertility declines and opportunities expand. Raising the age of marriage, keeping girls in school, enabling women through family planning to decide the spacing and number of their children, and investing in the health and education of young people, particularly young girls, can unlock a powerful demographic dividend and set countries in the Sahel on the path to sustained, inclusive social and economic growth. The time to act is now.’*

*(Babatunde Osotimehin, UNFPA  
Executive Director, 2013)*

## Population growth, climate change and conflict: case study of the Sahel

The Sahel, a belt of semi-arid land to the South of the Saharan desert, encompasses some of the poorest countries in Africa (see Table 3). The majority of the Sahel countries have experienced substantial economic growth over the past 15 years, despite the global financial crisis, and their economies are dominated by the agricultural sector. Estimates for unemployment in Sahel countries range from 3% of the labour force in Burkina Faso to 31% in Mauritania.

### Population dynamics, the Sahel and the Sustainable Development Goals

Progress towards the Millennium Development Goals was largely led by rapid economic growth and social development in Asia, in particular in China. Sustaining global progress during and beyond the coming 15 years will require inclusive economic growth and social development in countries in sub-Saharan Africa, with a particular focus on reaching the poorest and most vulnerable communities. Continued population growth in countries in the Sahel will mean that these countries will become increasingly influential when measuring development at a global level. However the Sahel is also particularly vulnerable to climate change and conflict, which may combine to undermine development gains.

The population of countries occupying the Sahel doubled between 1990 and 2010, due to high fertility rates and declining mortality, and in 2015 they had a total population of 316 million inhabitants (see Table 3), which equated to around 4% of the world's population. Up to a third of women in some Sahel countries have an unmet need for family planning. Projections by the UN Population Division (medium variant) indicate that the population of the Sahel countries will reach 1.6 billion people by 2100, equivalent to 14% of the world's projected population.



*The Inoussa family own about two hectares of land in the dry sub-Saharan Sahel region. Their property yields about two tonnes of millet, which is enough food for the family to live on for seven months, Niger, Aguié (Sahel Region)  
Photo: David Rose/Panos*

<b>Table 3. Current and projected population in countries in the Sahel</b>			
<b>Country</b>	<b>Population, 2015 (millions)</b>	<b>Projected population, 2030 (millions)</b>	<b>Projected population, 2100 (millions)</b>
Burkina Faso	17.9	26.6	75.3
Chad	13.6	20.9	63.3
Eritrea	6.7	9.8	21.8
Mali	16.3	26.0	100.8
Mauritania	4.1	5.6	12.4
Niger	19.3	34.5	203.8
Nigeria	183.5	273.1	913.8
Senegal	15.0	21.9	58.2
Sudan	39.6	55.1	116.1
<b>Total</b>	<b>316.0</b>	<b>473.5</b>	<b>1,565.5</b>

*Notes. Figures are rounded. Data are based on UN Population Division (2013a), medium variant*

There has been substantial migration from rural to urban areas in the Sahel and, as a result, rural communities have been left with a depleted workforce and urban areas have become overcrowded. With the exception of Senegal, the majority of urban populations in Sahel countries live in overcrowded slum areas. Extreme poverty, gender inequality and food insecurity throughout the Sahel have resulted in widespread malnutrition, and the prevalence of anaemia among children below 5 years of age ranges from 59% in Sudan to 86% in Burkina Faso.

Burgeoning populations and other demographic changes in Sahel countries have created a challenge for the provision of electricity, clean water and services such as health care and education. As many as 70% of adults in some Sahel countries are illiterate and the countries have high rates of maternal and child mortality. The health of women and girls is undermined by high prevalence of early, child and forced marriage and female genital mutilation in the region. In Niger, 75% of girls are married before the age of 18, as are 68% of girls in Chad. In Eritrea, Mali and Sudan, 89% of girls are victims of female genital mutilation.

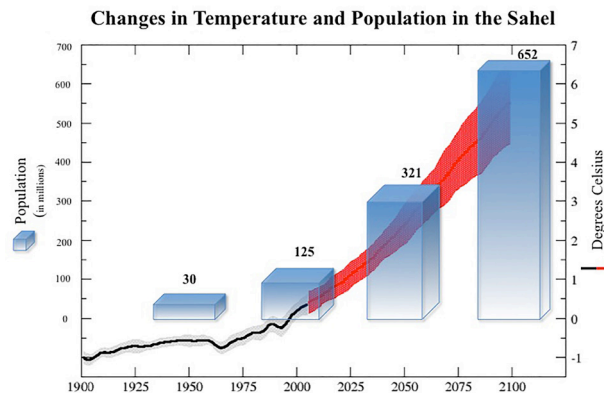
The Sahel is considered to be a potential reservoir for insurgent groups in part due to limited opportunities for education and employment for the region's youth bulge. Porous borders and low density populations in rural areas allow unopposed flow of people and weapons. During the last decade the US and France have taken a particular interest in supporting security forces in the region. In 2014 France announced the launch of Operation Barkhane, which aims to combat insurgent groups in Chad, Mali and Niger.



## A convergence of adverse conditions in the Sahel

People in the Sahel region already face a multitude of barriers to access basic essentials such as food, clean water, health care and education. Yet by the end of the 21st century an additional 1.2 billion people will be living in countries in the region. Climate change is expected to increase average temperatures in the region by 2 to 3 degrees Celsius by 2050 and the region is likely to continue to be severely affected by droughts and flooding (Potts et al., 2013). By 2100 temperatures in the region may be 5 to 6 degrees Celsius higher than in 2013 (Figure 11).

*Figure 11. Historical changes in temperature and population in the Sahel between 1900 and 2013, and projected changes to 2100*



Compiled by the OASIS Initiative University of California, Berkeley based on data from: UN Population Division (2013a), medium variant, and Intergovernmental Panel on Climate Change RCP 8.5

The likely loss of agricultural land and productivity due to climate change in the Sahel is a key concern. Yields are expected to fall for key crops including wheat, maize, sorghum and millet. Most of the Sahel countries are reliant on agricultural output and such losses would weaken local and national economies. Families reliant on income from work in the agricultural sector will be hit hardest.

The link between climate change and security was explored in a recent project funded by the UK Foreign and Commonwealth Office and the French Ministry of Foreign and European Affairs. The project, *Security implications of climate change in the Sahel*, highlighted the impact of climate change on livelihoods and food security, and the subsequent correlation with conflict. The project's authors noted that families in the Sahel are widely reliant on rain-fed agriculture, which is highly vulnerable to sudden and unpredictable changes.

Computer modelling has been important for mapping likely scenarios for food and water security in the Sahel. If the UN's "low variant" population projections are used, the greatest shortfalls in resource supply will be largely confined to Eastern Mali, Niger, Northern Nigeria and Eastern Sudan (Ardo and Abdi, written evidence). If the UN's 'high variant' projections are used, then demand for resources will far outstrip supply in much of the Sahel.

In coming decades the young population of the Sahel will be faced with a myriad of challenges including food insecurity, inadequate education, and job shortages. The region is already experiencing insurgencies such as Al-Qaeda in the Islamic Maghreb and Boko Haram. Without opportunities for higher education, employment and housing there is a risk that insurgent groups rather than governments will benefit most from the Sahel's demographic changes.

The breakdown of communities due to climate change and conflict is likely to exacerbate harmful practices such as child, early and forced marriage, which are closely linked with the economic security of households. In Syria, for example, the civil war that began in 2011 led to a resurgence in child marriage. Child, early and forced marriage is associated with intimate partner violence and early pregnancy, which heighten morbidity and mortality among women and girls.

Despite recent attempts to end sexual violence in conflict settings, there remains a risk that any conflict in the Sahel will undermine the rule of law and result in the systematic perpetration of sexual violence, which causes physical and psychological injury to victims and their families. Lack of access to family planning and sexual and reproductive health services drives young women in such settings to have unsafe abortions that are a significant cause of morbidity and mortality.

In 2014 the UK House of Commons Foreign Affairs Select Committee published a report *The UK's response to extremism and instability in North and West Africa*, which highlighted linkages between population growth in the Sahel and political instability in the region. The report noted that efforts to combat terrorism in the Sahel would need to address 'the environmental conditions that are allowing it to grow: poverty and inequality, corruption and mis-governance, the pressure of fast-growing populations on depleting natural resources, insufficient cross-border co-operation, and the spread of extremist ideology.' (page 4)



Chadian soldiers display arms captured from Boko Haram militants on 3 April, 2015 in Malam Fatori, in northeastern Nigeria, which was retaken from Islamist Boko Haram militants by troops from neighbouring Chad and Niger. Soldiers from Chad and Niger on 1 April, drove Boko Haram Islamist militants from the border town that was one of the insurgency's last footholds in northeastern Nigeria

Photo: Philippe Desmazes/AFP/Getty Images

*'When women have opportunity, resources and a voice, the benefits cascade to her children, her community and her country. So family planning is just the first step on a long journey towards growth, equality and development. But it's an essential step - saving lives and empowering women to fulfil their potential as great leaders of change.'*

*(David Cameron, UK Prime Minister, addressing the 2012 Family Planning Summit in London)*

## Making the economic case

The preceding sections have highlighted how population dynamics are likely to influence sustainable development in conjunction with climate change and with conflict. There are clear links between the different issues and achieving sustainable development will require investment in family planning and sexual and reproductive health and rights, as well as general health, education and welfare. Yet such investment is often lacking, with policy-makers highlighting budget constraints and competing priorities.



Man holding Somaliland shillings  
Photo: Tim Bewer/Lonely Planet Images/Getty Images

This section of the report speaks directly to policy-makers by highlighting the economic benefits of policies that are appropriate, incorporate population dynamics, and support family planning and sexual and reproductive health and rights. The section also highlights some of the costs associated with poor planning, inappropriate policies and political inaction.

### Population dynamics, economics and the Sustainable Development Goals

Population dynamics do not only pose challenges, they also provide important opportunities for more sustainable development. A fall in fertility levels and slower population growth for example leads to an increase in concentration of the population in the working age range, which can enable countries to reap the demographic bonus and jump start economic and social development.

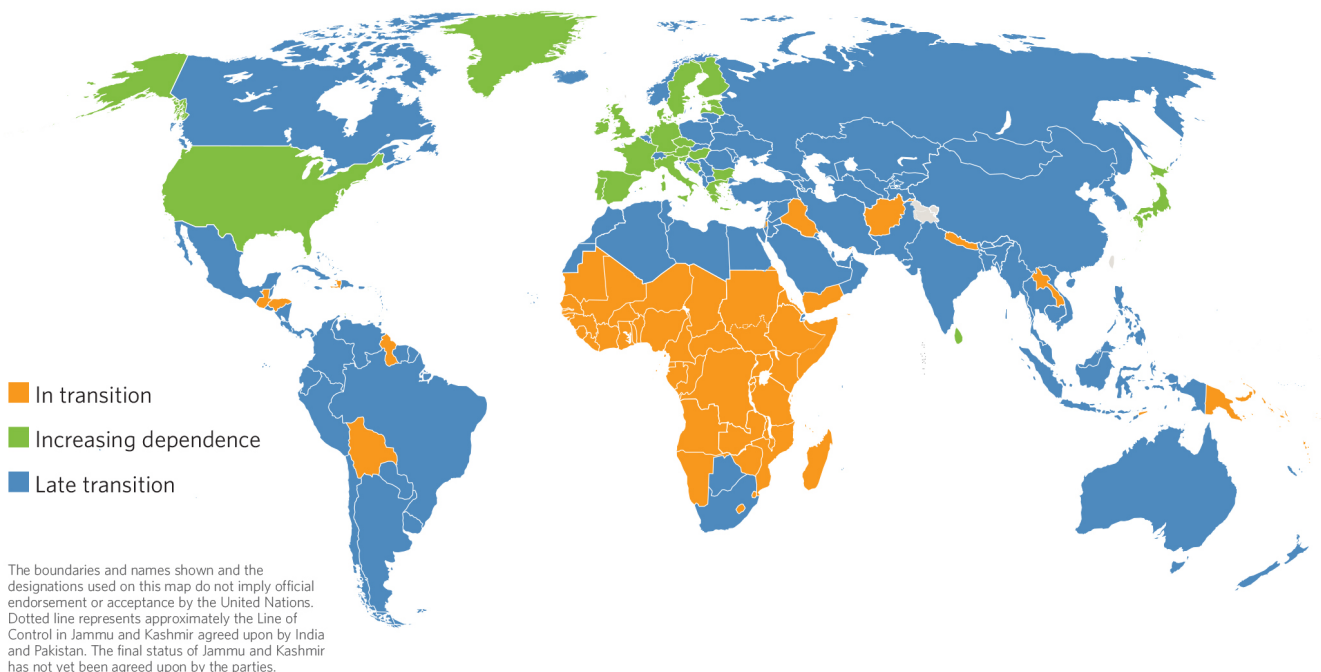
## Economic benefits – chasing the “demographic dividend”

Much attention has been devoted to the idea of a “demographic dividend” that follows reduced fertility in a country. The “dividend” results from the productive employment of a large working age population, when compared to the number of older people and children.

The “classic” route to realising the demographic dividend is gradual economic development. It is argued that improvements in health and nutrition lead to decreased child mortality. As more children survive, families that have access to family planning information and choices have fewer children and invest more resources in each child. Yet this is a slow process.

An alternative approach to development has been demonstrated by the “Asian tiger” countries: South Korea, Taiwan, Hong Kong and Singapore. More recently, countries such as Indonesia, Vietnam, Ethiopia and Rwanda have adopted an approach similar to the Asian tigers. These countries took an active approach to realising their demographic dividend. Access to family planning was offered to reduce the number of births. Health services, clean water and sanitation were provided to reduce the number of mothers and children dying. Education was rolled out to cater for the growing young population, employment opportunities were generated and female labour force participation rose.

Figure 12. Map showing countries in terms of stage in demographic transition



Source: UNFPA (2014)



Written evidence from the Asian Forum of Parliamentarians on Population and Development described experiences in Thailand where, in the 1970s, non-governmental and governmental organisations expanded access to family planning and invested in health and education. The evidence highlighted the importance of a stable political environment which encouraged investment.

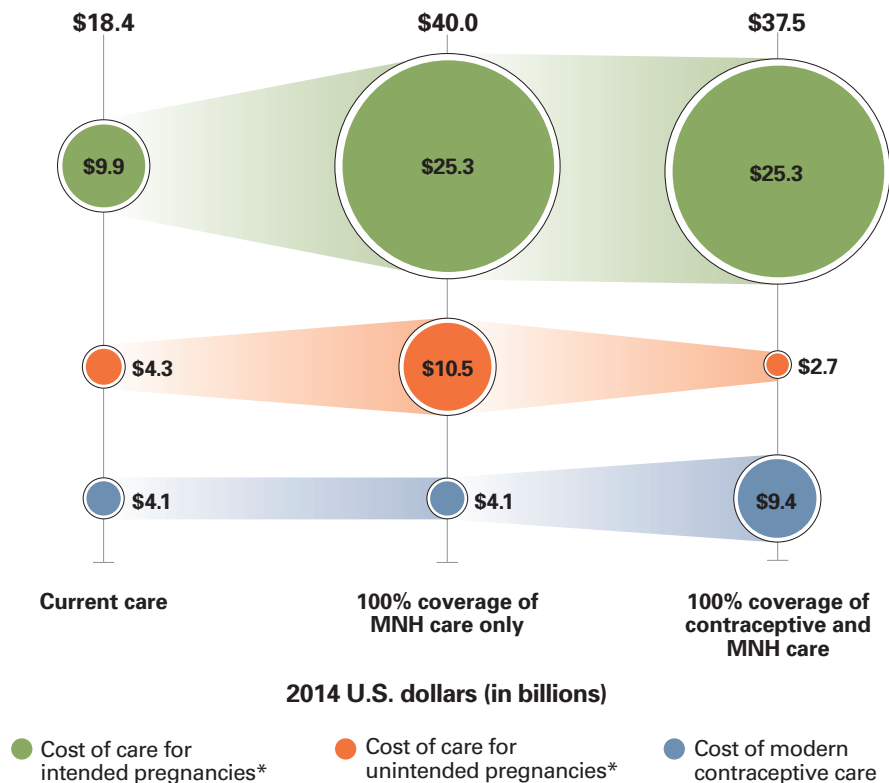
The Copenhagen Consensus Center highlighted 19 of the proposed 169 Sustainable Development Goal targets that represent best value-for-money (IPPF, written evidence). These 19 targets included universal access to sexual and reproductive health services and family planning, the elimination of violence against women and girls, increased education for girls, and universal primary education in sub-Saharan Africa. The value-for-money of universal access to sexual and reproductive health services and family planning was estimated to be US\$120 in economic benefits for each US\$1 spent (Kohler and Behrman, 2014).

<b>Table 4. Benefits and costs of meeting population and demography targets for the Sustainable Development Goals</b>			
<b>Target</b>	<b>Annual benefits (US\$ billion)</b>	<b>Annual costs (US\$ billion)</b>	<b>Benefit, per US\$ spent</b>
Universal access to sexual and reproductive health services by 2030, and eliminate unmet need for modern contraception by 2040	\$432	\$3.6	\$120
Reduce barriers to migration within low- and middle-income countries, as well as between low and middle-income countries and high-income countries			>\$45
Elimination of age-based eligibility criteria for retirement			High
Promote more efficient and more equitable urbanisation			High
Increase low fertility in high-income countries			<\$1
Maintain and expand public pension eligibility at relatively young old ages			Low

Source: Kohler and Behrman (2014)

The Guttmacher Institute and UNFPA have also examined the cost-effectiveness of family planning, finding that the benefits from decreased costs of pregnancy-related care alone would outweigh the US\$9.4 billion annual cost of meeting unmet need for family planning (Guttmacher Institute and UNFPA, 2014). Their *Adding it Up* report estimated that universal access to modern methods of family planning would prevent 24 million abortions (including 15 million unsafe abortions), 6 million miscarriages, 70,000 maternal deaths and 500,000 infant deaths.

Figure 13. Cost of providing maternal and newborn health in developing countries (in US\$ billions)



Source: Guttmacher Institute (2014)

## Economic benefits – migration

Low and declining fertility in many developed countries is leading to an increase in the dependency ratio, which is the proportion of people not of working-age, compared to those who are. In these countries, there are fewer working people supporting a growing number of older people. At the same time, the cost of social and health care for older people is rising. In such settings, which include Japan and many European countries, international migrants offer an important pool of labour.



*Medical team chat to senior patient about her condition  
Photo: Sturti/E+/Getty Images*

The average age of the UK population is 40 years and fertility among women born in the UK is below replacement level, just 1.8 births per woman (UK Office for National Statistics, written evidence). The UK's dependency ratio is projected to rise dramatically over the next 30 years as the population continues to age. Inward migration offers one opportunity to sustain the UK economy. It has been estimated, for example, that reduced migration, if the UK left the European Union, would reduce the UK's gross domestic product (GDP) by 2% by 2050 (Centre for Economics and Business Research, 2013).

One criticism of inward migration is that it only passes the economic challenges of inevitable increases in dependency ratio to subsequent generations. Lord Turner (Chair of the UK Pensions Commission, 2002-2006) proposed that countries with aging populations such as the UK should instead use incremental increases in the age of retirement on the basis that 'assuming a fixed retirement age and a need to raise fertility or increase immigration in order to maintain pensions at a fixed proportion of the gross domestic product (GDP) is overstated and wrong.' (Turner, 2009).

There are also economic benefits of migration for places of origin. Migrant workers provide remittances, which in 2012 totalled US\$530 billion globally - three times more than total global official development assistance (Population and Sustainability Network and the Population and Sustainable Development Alliance, written evidence). A "brain drain" of skilled workers is one risk of migration however there is growing recognition of the role played by returning skilled migrants who become industry leaders in their country of origin.

## Costs of inaction

Written evidence from Population Matters highlighted the infrastructure costs of population growth. Research commissioned by Population Matters found that on average for each additional person in the UK an investment of £165,000 is required to expand services, infrastructure and training (Population Matters, written evidence), although the research did not examine possible economic and social benefits that accompany each additional person.

Written evidence from Marie Stopes International drew attention to a report by the High Level Task Force for the International Conference on Population and Development (ICPD), which highlighted a series of costs associated with inadequate access to family planning and sexual and reproductive health and rights (High Level Task Force for the ICPD, 2015). The report noted that the HIV epidemic had reduced the agricultural workforce in 12 high prevalence countries by 3-10% leading to poverty and food shortages. The cost of maternal and newborn mortality and morbidity led to productivity losses of US\$15 billion and out-of-pocket expenditure by families of US\$34 billion. Unsafe abortion in particular was highlighted as costing health systems in developing countries US\$800 million each year, and an additional US\$600 million in out-of-pocket expenditure.

Poor urban planning already inflicts economic costs on countries worldwide. The DFID-funded Future Proofing Cities report noted that environmental degradation costs countries such as Ghana, Pakistan and Nigeria up to 10% of their GDP. Traffic congestion alone in cities such as Dakar, Senegal costs up to 3% of GDP.

Without better planning and investment in resilient infrastructure the cost of poor planning will continue to rise. The Royal Society's Resilience to Extreme Weather report cited research estimating the global annual cost of flooding to be US\$1 trillion by 2050. Earlier research has suggested that the cost of climate change may be as high as between 5% and 20% of global GDP due to extreme weather, reduced crop yields and mortality (Stern, 2007).



*Rescue workers pull the bodies of illegal immigrants onto shore in al-Qarbole, some 60 kilometres east of Tripoli on 25 August, 2014 after a boat carrying 200 illegal immigrants from sub-Saharan Africa sunk off the Libyan capital two days earlier. Libya, which is mired in unrest and political chaos, has been a launchpad for illegal migrants seeking a better life in Europe, they often turn to people smugglers to get them across the Mediterranean*  
Photo: Mahmud Turkia/AFP/Getty Images

*'It will be impossible to meet the needs of people and to promote the wellbeing of both current and future generations, if we do not know how many people are living and will be living on this planet, where they are living and will be living in the future, and what their age distribution is now and in a few decades from now. The new development agenda must consider these population dynamics and address the associated challenges.'*

*(Report of the Global Thematic Consultation on Population Dynamics, 2013)*



## Conclusions and recommendations

Population dynamics interact with climate change and with conflict to affect people and communities, and will increasingly do so over the course of the 21st century. If the world is to achieve sustainable development then there is an urgent need to scale up access to family planning, and to support sexual and reproductive health and rights. Migration and urbanisation must be supported with appropriate policies and investment in resilient infrastructure, public services and employment. Yet, such approaches are not short-term solutions to the world's problems and there is an urgent need to reduce consumption and carbon emissions.

The UK Government must be commended for taking a leading role in initiatives related to population dynamics, for example the 2012 Family Planning Summit, the 2014 'Girls' Summit and the 2014 Ending Sexual Violence in Conflict Summit. Cross-departmental initiatives on forced marriage and female genital mutilation are also to be commended, as is the Department for International Development's support for the Future Proofing Cities project. However, the House of Commons International Development Committee (2015) has recently raised concerns regarding relative reductions in spending on reproductive health by the Department for International Development.

This report has ten recommendations to support the UK and other governments and their national and international partners to achieve sustainable development:

1. **Increase funding for family planning and the wider sexual and reproductive health agenda to 10% of official development assistance and 10% of national development budgets.** This has been endorsed repeatedly at International Parliamentarians' Conferences on the Implementation of the ICPD Programme of Action in Ottawa (2002), Strasbourg (2004), Bangkok (2006), Addis Ababa (2009), Istanbul (2012) and Stockholm (2014). Family planning is one of the most cost-effective development interventions and greater funding will increase access and equity, expand the method mix and promote innovative use of technology.
2. **The Sustainable Development Goals and targets must not be renegotiated.** The draft framework contains goals on healthy lives and gender equality and targets on: a) universal access to sexual and reproductive health care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes; b) universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the ICPD and the Beijing Platform for Action and the outcome documents of their review conferences, and c) reducing the global maternal mortality ratio to less than 70 per 100,000 live births. It is imperative that these goals and targets are subsequently translated and included in all national development plans and accompanying budgets.

- 3. Advocate for Sustainable Development Goal indicators at global and national levels that are reliable and comparable and measure progress in achieving universal access to family planning and the wider sexual and reproductive health and rights agenda.** Specifically, the following indicators must be included in the post-2015 framework: percentage of women and girls who make decisions about their own sexual and reproductive health and reproductive rights; existence of laws and regulations that guarantee all women and adolescents informed choices regarding their sexual and reproductive health and reproductive rights; adolescent birth rate; demand satisfied with modern contraceptives; percentage of women aged 20-24 who were married or in a union before age 18, incidence of unsafe abortion and percentage of girls and women aged 15-49 years who have undergone female genital mutilation. Data should be high-quality, timely and reliable, and disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.
- 4. Urgently press for further commitments to reduce resource consumption and carbon emissions, and support investment in low-carbon forms of development.** The current level of greenhouse gases in the atmosphere will lead to an increase in the average global temperature of 2 to 3 degrees Celsius by the end of the 21st century. Emissions over coming decades must be dramatically curtailed to avoid temperature rises of more than 2 to 3 degrees Celsius. This will require the coordinated effort of governments worldwide to reduce resource consumption and support low-carbon development.
- 5. Amend the UK International Development Act 2002 to mandate the Secretary of State to consider the impact of development assistance on population dynamics, and vice versa.** In 2014 the International Development Act was amended to mandate the Secretary of State to have regard to gender inequality when providing development assistance. Legislation to consider the impact of UK development assistance on population dynamics (in terms of population size, trend, age structure, migration, urbanisation and other relevant population variables) would help countries to plan for their future and lead to equitable sustainable development. Equally, UK-supported development programmes should plan for the effects on demand for services of population growth, aging, migration, urbanisation and other relevant population variables.
- 6. Utilise the economic arguments presented in this report to support governments, and finance ministries in particular, to develop appropriate laws, policies and investments that promote universal access to family planning and the wider sexual and reproductive health agenda.** Voluntary family planning is a key component of achieving a demographic dividend and is a highly cost-effective development intervention.

- 7. Legislate and develop policies and programmes to prevent and address gender-based violence and invest in long-term planning capabilities with better quality data on population dynamics, contraceptive prevalence and unmet need for family planning.** Substantial changes and challenges in population size, age, migration and urbanisation are expected over coming decades and there is an urgent need for all ministers to be made aware of this. Better quality data is needed on population dynamics, contraceptive prevalence and unmet need for family planning, and should be disaggregated by characteristics including income. Well-planned and managed policies on migration and urbanisation, and laws protecting women, young girls and migrant workers, will help to achieve a stable and sustainable world for all.
- 8. Support and invest in secondary education for girls to promote gender equality and empower women.** Universal access to secondary education is fundamental to achieving the demographic dividend. Access to secondary education is linked to increased age of marriage, greater reproductive autonomy, improved economic productivity and better health outcomes. When combined with better access to family planning, secondary education for girls will promote gender quality and help to achieve sustainable economic and social development.
- 9. Champion universal access to health care and remove unnecessary barriers, particularly for young people and migrant workers.** The UK has been a leader in universal health coverage, free at the point of use, since the formation of the National Health Service almost 70 years ago. Such a model should be championed worldwide and should include family planning, maternity services and tailored and confidential services for most-at-risk groups including young people and migrant workers. The UN and governments in the UK and elsewhere, must remove unnecessary barriers to the uptake of family planning – including emergency contraception – and the requirement for prescriptions and third party consent for dispensing oral contraceptives should be eliminated. Misoprostol must be readily available to ensure women can have access to life-saving care.
- 10. Work with conflict, humanitarian, security and climate change groups to promote a holistic approach to sustainable development that ensures universal access to family planning and sexual and reproductive health and rights.** At present, the political will to support universal access to family planning and sexual and reproductive health and rights is limited to specific regions, countries and ministries. There is a need in every country for more female and male parliamentarians and civil servants to become champions of family planning and sexual and reproductive health and rights. Proponents and activists can support this by recognising overlap between their agendas and those of climate change and conflict groups, and by working together to foster champions of sustainable development.

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## Appendix 1: list of written evidence

- Age International
- Asian Forum of Parliamentarians on Population and Development
- Jonas Ardo (Lund University)
- Joseph Assan (Brandeis University)
- Marge Berer (Reproductive Health Matters)
- Corey Bradshaw (University of Adelaide)
- Priya Deshingkar (University of Sussex)
- Futures Group
- International Planned Parenthood Federation
- Maries Stopes International
- Gordon McGranahan (International Institute for Environment and Development)
- Medsin
- Edward Morgan (no affiliation)
- Robert Muggah (Igarapé Institute)
- Office for National Statistics
- Population and Sustainability Network and the Population and Sustainable Development Alliance
- Population Matters
- Malcolm Potts (University of California, Berkeley, and the OASIS Initiative)
- Cecilia Tacoli (International Institute for Environment and Development)
- The Royal Society
- UNFPA
- Maya Unnithan (University of Sussex)
- Alan Young (no affiliation)

## Appendix 2: list of expert witnesses

### Monday 23rd February 2015

Qadeer Baig, **Rutgers WPF, Pakistan**  
Nicole Bidegain Ponte, **Women Working Group on Financing for Development, Development Alternatives with Women for a New Era**  
Zane Dangor, **Ministry of Social Development, Republic of South Africa**  
Caroline Halmshaw, **Plan UK**  
Sam Ntelamo and Rebekah Webb, **International Planned Parenthood Federation**  
Dr Kiran Regmi, **Chief Focal Point of Health and Population, Nepal**

### Monday 2nd March 2015

Bethan Cobley, **Maries Stopes International**  
Dr Scott Moreland, **Futures Group**  
Dr Daniel Schensul, **UNFPA**

### Thursday 5th March 2015

Roger Martin, **Population Matters**  
Professor Malcolm Potts, **University of California, Berkeley, and OASIS Initiative**  
Professor Maya Unnithan, **University of Sussex**  
Dr Priya Deshingkar, **University of Sussex**

### Monday 9th March 2015

Professor Georgina Mace, **University College London (on behalf of the Royal Society)**  
Dr Gordon McGranahan, **International Institute for Environment and Development**  
Dr Cecilia Tacoli, **International Institute for Environment and Development**  
Karen Newman and Sarah Fisher, **Population and Sustainability Network**

### Thursday 12th March 2015

Marge Berer, **Reproductive Health Matters**  
Gemma Bowsher, **Medsin**  
Dr Richard Cincotta, **Stimson Center**  
Alison Marshall, and Doortje Braeken, **International Planned Parenthood Federation**



# POPULATION DYNAMICS AND THE SUSTAINABLE DEVELOPMENT GOALS

**A report by the UK All-Party Parliamentary Group on  
Population, Development and Reproductive Health**

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**July 2015**

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