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**Population and food security:  
Key trends and changing dynamics**

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# Population and food security: Key trends and changing dynamics

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## Abstract



One of the turning points in the development world occurred during the 1994 International Conference on Development and Population (ICPD) in Egypt which marked the fundamental shift away from the numerical aspects of considering population and development dynamics to a human-rights approach. A consensus in its Programme of Action provided that: 'The relationship of population to development is so intertwined with issues of poverty, patterns of production and consumption, and inequality, that none can be fruitfully addressed in isolation'. Twenty years on, a lot has been achieved, emphasising, however, a lot more needs to be done. Developing countries' population bases are projected to rise from 5.9 billion in 2013 to 8.2 billion in 2050 and 9.6 billion in 2100. Growth is expected to be particularly dramatic in the least developed countries of the world: from 898 million in 2013 to 1.8 billion by 2050 and 2.9 billion in 2100. Youth and children populations now in least developed countries are at an all-time high: 1.7 billion children and 1.1 billion young people. Globally, the population aged 60 or over is the fastest growing cohort. In developed regions it is increasing at 1.0% annually (before 2050) while the 60 or over-60 cohorts in less developed regions are increasing at the fastest pace ever. Respecting fundamental human rights in framing policy interventions that understand the role of sexual and reproductive health and rights in policy and programming will be critical to responding to shifts in population dynamics. People must be in the centre of our collective response to the changing dynamics and key trends presently experienced globally, in particular countries with urgent food security issues.

Last year in June the population on the planet reached 7.2 billion persons. These numbers come from the counts made by the UNFPA (United Nations Population Fund), which is the group within the United Nations system responsible for correct population numbers. In 2025, 'just around the corner', we will have 1 billion more people on the planet; that means 8.1 billion people.

If we continue like that, Figure 1 shows the future. The blue line represents the projection if fertility should decrease, which we call the low-variant population. Following the solid blue line you can see that by 2050 we will reach 9.6 billion persons, and 10.9 billion by 2100. If on the other hand fertility stays the same

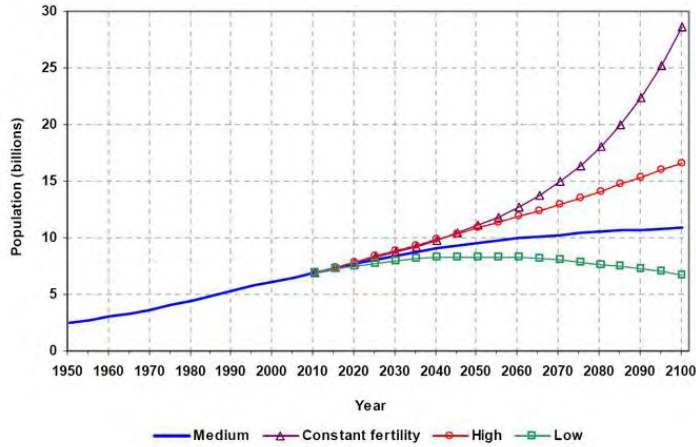


Figure 1. Population of the world 1950–2100, according to different projections and variants. Source: United Nations Department of Economic and Social Affairs, Population Division (2013). [Note: ‘constant fertility’ in the graph means ‘if fertility were to remain constant at the levels estimated for 2005-2010’ (ibid. p. 3).]

as now, we will have 10.9 billion on the planet in 2050, and 16.6 billion in 2100. Fertility greatly influences the total population.

I should emphasise that the bulk of this population growth will be in countries that are less developed and least developed (Figure 2). In 2013 the population of less-developed countries was 5.9 billion people, and there were 898 million people living in the least-developed countries, according to the United Nations classification of countries as low income, middle income and higher income.

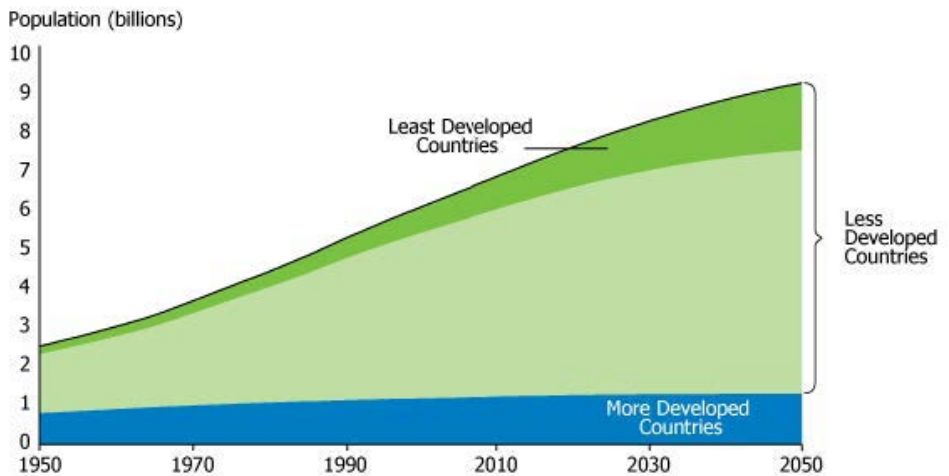


Figure 2. Proportional population growth expected in least and less developed countries compared to more developed countries, 1950–2050. Source: Population Reference Bureau.



Figure 3. Youth and ageing are two important fast-growing cohorts, especially in less-developed regions.



The international community will be facing the problem of feeding a lot of people in the developing world. They need the right tools to do that. In the projected population for the year 2100 we estimate those extra 3.7 billion people will include 1.6 billion between 15 and 59 years of age, and 1.9 billion of 60 years and above. The number of children under 15 will remain more or less the same.

Youth and children in less-developed countries are two very important groups that need to be considered in relation to international aid and trade. I know the Australian Government and Australian international partners are very aware of this cohort, which will comprise 1.7 billion children and 1.1 billion young people. The less-developed countries will have to secure adequate education and decent jobs for these two cohorts.

The ageing population is another critical cohort. It is surprising to us within the United Nations system that there has been little discussion about this group. In looking for countries with experience in ageing matters we have turned to Japan, which has the largest ageing population in the world. They have some approaches to offer the international community in terms of social protection and longevity for the older generations. The ageing population is growing at a very fast rate in the developed world: 1% annually. This is also a fast-increasing cohort in the less-developed world. Images on international television can be misleading because they tend to show only young children that are deprived – but the ageing populations are facing very difficult situations as well.

These changing population dynamics affect food security (Figure 4). The Food and Agriculture Organization of the United Nations (FAO) has suggested that by 2050 we will face a doubled demand for food, which means that the world will have to produce double the amount of food by then. You, at this conference, will be involved in this task for the future and its increased pressure on natural resources. Consider the challenge in Kiribati, for example. Imagine the pressure on the land in the small atoll Tarawa, only a few tens of metres wide in some places. That is a big challenge.

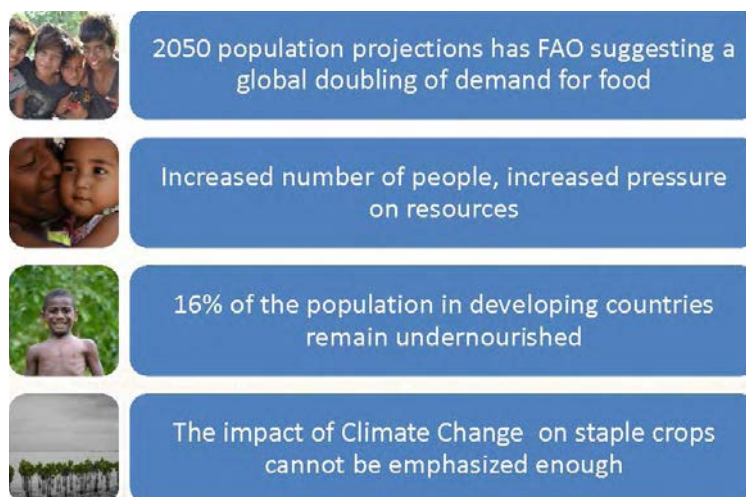


Figure 4. Changing population dynamics affect food security.

Governments of these countries are very worried about climate change. The President of Kiribati, one of our best champions, goes all over the world, including to our meeting in New York, to say: 'For us it's too late; the water level has risen already; we are under water in some areas of our land'. Kiribati is buying land in Fiji which has islands with mountains. This is a new phenomenon, these climate-change refugees, people that will have to resettle because of climate change. Who is responsible for relocating them? The state? The private owners of the land? This is a big challenge that they are already facing.

The contradiction in this picture is that 16% of the population in the developing world remains undernourished. We see pictures of children not able to grow normally, and of mothers not able to feed their children. The impacts of climate change cannot be emphasised enough, and in the Pacific this is a very urgent issue.

At the Small Island Developing States Conference in 2014 the main topic for discussion is climate change. Kiribati, Tuvalu and other countries are facing rapidly increasing sea water level, and so they are looking at climate change very carefully. This conference is a United Nations meeting with 2500 delegates, primarily to discuss climate change.

Turning now to the Pacific Region (where I am based, in Fiji), there are two extreme situations which are very relevant for Australia's international aid and trade. First there is a very high adolescent fertility rate in most Pacific Island countries, and there is a high rate of teenage pregnancy. In addition we have a depopulation phenomenon: people in Niue prefer to go to New Zealand; workers from Tonga and Samoa go to work in New Zealand; Fijian workers go to Australia to be migrant workers; and so on. From the northern Pacific Island countries the workers prefer to go to Guam or Hawaii.

Another issue is the interaction of life expectancy and land rights. It is sometimes overlooked that in Pacific Island countries women outlive men but they do not inherit the land. When the husband or partner dies the woman that stays behind will have to provide for the family, but she does not inherit the land. That is a big issue.

Life expectancy in France is 79 years for men and 85 for women; in Australia it is 80 years of age for men and 84 for women; and at the bottom of the rankings is Papua New Guinea with life expectancies of 54 years for men and 55 for women. There is a range of life expectancies across the Pacific (Figure 5).

Another striking set of numbers in the Pacific is the contraception prevalence rate. In Australia, 71% of women aged 15–49 use contraceptives, and 79% in the USA, but on average in the Pacific the rate is 20–50%. This is much too low.

Are we to blame? Maybe the international community is not investing enough to ensure wide use of contraceptives in the Pacific. There are success stories elsewhere. In Bangladesh, for example, there has been an amazing change: women there now are working in many areas of government – and there is very wide use of contraceptives. Yet while there are plenty of success stories, there are still countries not addressing this issue.

What should be done? What should the international community do about this? In 1994, the United Nations held the International Conference on Population Development (ICPD) in Cairo. At this very important conference they developed a plan of action and recommendations. The first thing that became evident was that ‘the relationship of population to development is so intertwined with issues of poverty, patterns of production and consumption, and inequality, that none can be fruitfully addressed in isolation’ (ICPD Programme of Action 1994).

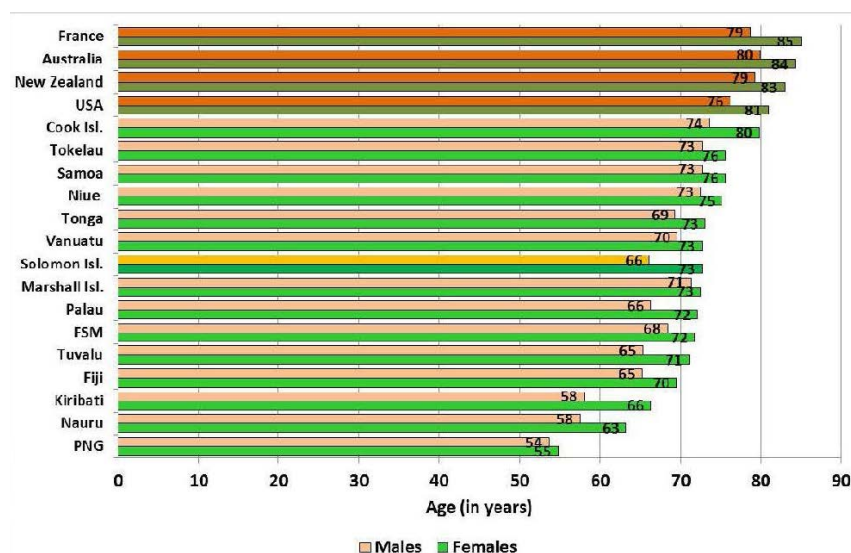


Figure 5. Life expectancy at birth in Pacific Island countries and four developed nations.

At this conference 20 years ago we decided that ‘population-related goals and policies are integral parts of cultural, economic and social development, the principal aim of which is to improve the quality of life of all people’ (Principle 5, ICPD Plan of Action). The agenda was set, a plan of action was developed, and the UNFPA was asked to monitor what happened.

The focus was very much a new focus, looking not only at numbers but at the human rights discourse – which means that to tackle these issues you have to do so in terms of human rights. To elaborate, when a young woman decides she wants to be pregnant, that choice is a right she has; it is the right of the couple to decide when they want to have children. For many years people told young women that if they have too many children they will face difficulties in raising, educating and providing for them. Now, instead, the discourse acknowledges that it is a young woman’s right to decide, to be pregnant by choice and not by chance, and this has produced positive results.

In Cairo we decided we have to look at the individual and how to secure people’s futures in this context of population and development. The principle of action that was developed there acknowledged population and development and food security as integrated issues that should be tackled together.

The UNFPA has been asked, 20 years later, to review what came out of those decisions. We have sent questionnaires to many countries – to people, ministers, non-government organisations, civil society organisations, and so on – and we have asked them: ‘Have you made progress on the population and development agenda?’ (Figure 6). We have been pleasantly surprised. Many things have progressed, although many things remain to be addressed.



Figure 6. Aims arising from the International Conference on Population Development (ICPD) which are being reviewed by the UNFPA.



In 1994 the ICPD Consensus stated: ‘Increasing social, economic and political equality, including sexual and reproductive health and rights, are the basis for individual wellbeing, lower population growth, and sustainable development’.

### **Access to sexual and reproductive health and rights**

Now, 20 years later, we still see that access to sexual and reproductive health and rights is not universal in many countries – it has not happened yet. We think that the international community has to do better in that aspect. Influencing the population side of the equation will have a direct impact on the food that will be needed tomorrow. We are puzzled by some of the results, good and not so good, and have discussed them thoroughly. The findings from our review of the ICPD are being presented to members of the UN in September 2014.

### **Gender equity**

The ICPD recognised that gender would require multi-sector investment. When we talk about gender we are talking specifically about access to land. That is the key point, and it is essential in relation to food security. We are looking at capital investment opportunities: small grants that can enable women to be smallholder farmers. Although this is happening, it is not happening enough: the gender dimension is not being fully addressed.

### **Access to food**

Thanks to the work of many at this conference there is a lot of food available around the world, and sometimes wasted. A key issue is access to and distribution of this food. In some countries in a fragile state, such as Somalia and Eritrea, we see that conditions prevent there being a distribution system that will allow the people to have access to food. So we have a big challenge in terms of access and distribution of this food.

### **Governance and accountability**

It is clear to us that governance and accountability can provide an enabling environment in which to achieve food security. As part of the UN mandate to look at governance issues, the impacts of corruption and crime are being examined, and also the number of women in parliaments. In France, 225 years since the French Revolution of 1789, only 26% of members of parliament are women. For the people involved in the French Revolution, especially the women, to have foreseen such a low involvement of women in parliament, it would have been a disappointment.

As I travel around the Pacific I always ask the chair of the parliament, ‘How many women do you have in your parliament?’, and they say, or sometimes they say, ‘We are looking at it’. I respond, ‘Well that’s a good first step’. In one country they said, ‘We have enacted a law that says we will have 10% of parliament members as women in 2016’. That is a good start, but it is only 10%. This governance issue has an important bearing on, for example, the distribution of land. Who will enact a law that will defend acquisition of land, in the parliament, if countries do not have women parliamentarians?

For us, accountability is important because we are using taxpayers’ money from around the world, and we want to make sure that this international aid money

is used the proper way and gives the necessary results. We are very encouraged by the point the Australian Foreign Minister, the Hon Julie Bishop, makes in her paper (Bishop 2014) – about a strong focus on results and accountability to guide Australia's aid and trade investment abroad.

### **Role of the UNFPA**

The staff of the UNFPA are working on several fronts to help ease the pressures of large populations in relation to development and people's needs. The first thing we do is to talk about comprehensive sexuality education at schools. Some countries do not like the term 'comprehensive sexuality education' so we call it 'family life education'. It means giving teenagers information on reproduction and biology so that once they reach the age of 16 they can make informed decisions about their future sexual behaviour. We have had good success in the Pacific where family life education is taught to children. Sometimes there is opposition, but most of the Education Ministers are fully 'on-board'.

We also count people via careful census. You need these data, desegregated, so you can plan food supplies. We help countries to do their census, and sometimes that is complicated. In my last posting we were counting people in Kabul in Afghanistan, which was a challenge because we had to be safe to count people and we needed to be in places where people could be counted. We also examine data, such as data related to violence against women to help police respond appropriately to cases of domestic violence, and to make sure that healthcare workers deal adequately with gender-based violence. We also make sure that judicial systems punish the perpetrators of violence against women.

A third thing that we do is develop activities to promote sexual and reproductive health and rights. These are mainly youth-focused services, giving them access to ask for contraception without being stigmatised. In a small island country, that can be awkward for people, because everybody knows everyone.

The UNFPA also provides contraceptives around the world. We buy them from funds provided us by various countries, including generous support from the Australian Government Department of Foreign Affairs and Trade. We buy on the international market, and we make sure that they are distributed. In the Pacific, UNFPA is providing contraceptives to all the Pacific Island countries.

The fifth thing that we do is to try to communicate with the people in an integrated way. We cannot go door to door to talk with people. In Fiji, for example, there is a very interesting system. The women gather in the village regularly, and they may talk about (most likely) how poorly men behave, but they also talk about what can be done about it. When, for example, they talk about how to distribute the income of the village, or how they plan to deal with other issues, we can take the opportunity to talk with them about health issues. These might include non-communicable disease, which is a big issue in the Pacific where there are a large number of obese persons, and we can also talk about reproductive and sexual health and rights. This is very effective. We call it this system 'household resource management'.

### **Innovation, partnerships and human development**

There is need for innovation and partnerships, and the UNFPA is very pleased that the Crawford Fund has addressed this matter and sees the linkages between gender equality initiatives and food security. In the UNFPA we say repeatedly that gender equality is related to access and distribution; and by carefully and methodically reviewing the aid and trade investment data you can see if gender equality issues are being addressed.

There is a need to direct investment to boost women's agricultural capacity. When women have credit, land, appropriation of land, and access to food production, they can make incredible gains in food security for themselves and their families. We should not see population growth only as a threat to food security, but instead we should look at how we can better manage population growth – how we can be smarter and more innovative.

### **Looking to the future**

In conclusion I would like to look to the future. Nowadays in New York and around the world many experts are discussing how we should shape the post-2015 agenda. We have the Millennium Development Goals (MDGs), and some countries have achieved great advances in terms of MDGs. Other countries are not achieving in the same way. We know there are costs involved, but in some countries the lack of achievement is because of very bad political leadership which has prevented the MDGs being tackled, presenting obstacles. Young people know what to do about the MDGs, but they may not have even been consulted. We have to look at the post-2015 agenda in a way that involves many more players.

This is a challenge for us in the United Nations because we are a multi-governmental organisation. Our main counterpart is government. Therefore we are taking the initiative and involving a wider range of experts, academics, young people and civil society organisations, to define the post-2015 agenda. We are counting strongly on Australia to drive the agenda forward, as well as our New Zealand colleagues, because we know that you are strong advocates for dealing with the population issues outlined in this paper. You can help shape the post-2015 agenda around the world, and your focus on agricultural research and development will be essential in this post-2015 agenda.

Some countries' governments say: 'Well you are the United Nations; you have experts. You take care of it. Just report to us once a year'. We find that kind of attitude puzzling, because we are using taxpayer money every day, and we need a result. But in the case of Australia, we know that you carefully observe what we do, that we will be accountable to you for failure and sometimes recognised for success. After all, the success of the United Nations is the success of the member states.

The United Nations is counting on you, as members of the Australian Government as well as the Crawford Fund, to shape the post-2015 agenda so it answers all those basic needs for food security and other matters for the people around the world.

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Dr Laurent Zessler, UNFPA's Director and Representative for UNFPA's Pacific Sub-Regional Office, based in Fiji, was appointed to this role in November 2013. Previously he was in Afghanistan for some three years as UNFPA's Country Representative. Dr Zessler, a national of France, joined UNFPA in 2011 from UNAIDS, the Joint United Nations Programme on HIV/AIDS, where he had served as Senior Regional Adviser for West and Central Africa. He also was country director for Brazil, Argentina, Chile, Paraguay, Uruguay, Vietnam, Pakistan and Ecuador between 1996 and 2011. In 1995, Dr Zessler served as the AIDS/STI (sexually transmitted infections) Inter-country Adviser for the World Health Organization (WHO) in Pakistan; until then he had served as the AIDS/STI Inter-country Adviser for PAHO (Pan American Health Organization)/WHO from 1989 in Ecuador, Venezuela, Uruguay, Argentina, Chile, Paraguay and in Washington DC. Dr Zessler has also worked as an Associate with the Pasteur Institute in France and as a medical officer for the Ministry of Foreign Affairs in Sudan. He holds a Doctorate in Medicine from the Paris School of Medicine, Université René Descartes, a Masters in Public Health from the Bloomberg School of Public Health at Johns Hopkins University and a Fellowship in Infectious Diseases at the School of Medicine at Johns Hopkins University.

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