



Population and Sustainability Network

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Population: Avoiding Heffalump Traps
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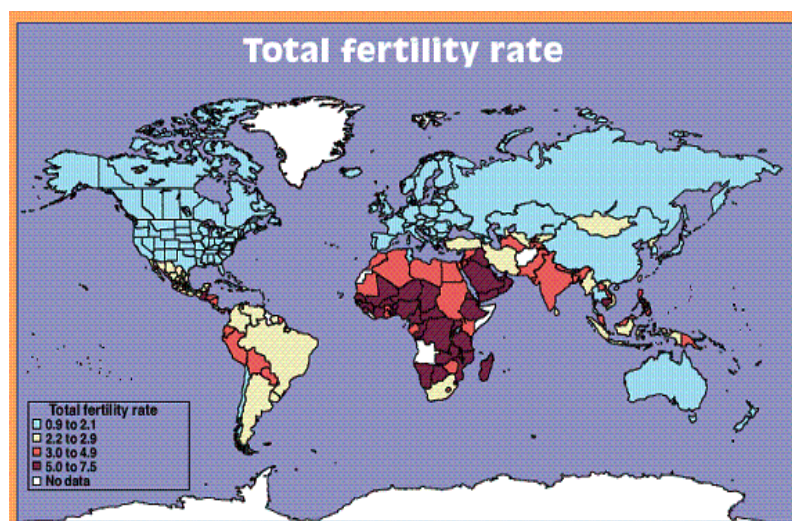
Does population growth matter? Why?

Principally it matters because we live in a finite world with finite resources.

About 80 million additional humans join our world every year – that's a little less than the combined populations of the UK and the Netherlands, each year. Does this growth matter?

A related question is: **does it matter that over 200 million women are not able to control their fertility and space their children because of lack of access to family planning?**

More than 20% of pregnancies are unintended.



Unmet need for family planning

- ▶ Having the ability to plan and space pregnancies is recognised as a human right by many.

Yet.....

- ▶ 215 million women worldwide who want to avoid a pregnancy do not have access to modern contraceptives.

(Guttmacher Institute, 2010)

My next question is: **why has population dropped off the international policy agenda since the 1990s?**

Sex, death, race, power, religion, poverty, equality and justice – just eight words which indicate the intricacies of any discussion about population.

To understand the complexities and the disputes about the population issue rather better, a brief history is necessary.

A Quick History of Global Population Growth

It took from the beginning of humans until about 1800 to reach.....1 BILLION

1800 to 1930 (130 years) to reach2 BILLION

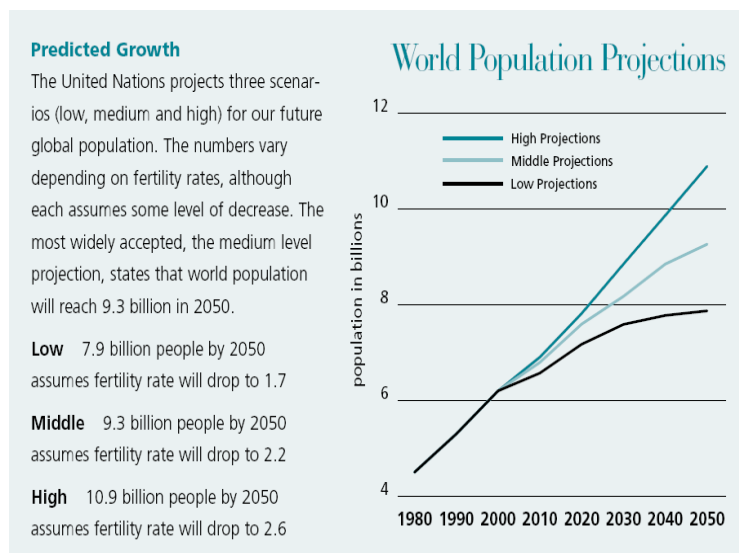
1930 to 1960 (30 years) to reach3 BILLION

1960 to 1974 (14 years) to reach4 BILLION

1974 to 1987 (13 years) to reach5 BILLION

1987 to 1999 (12 years) to reach6 BILLION

1999 to 2013 (14 years) estimated to reach7 BILLION



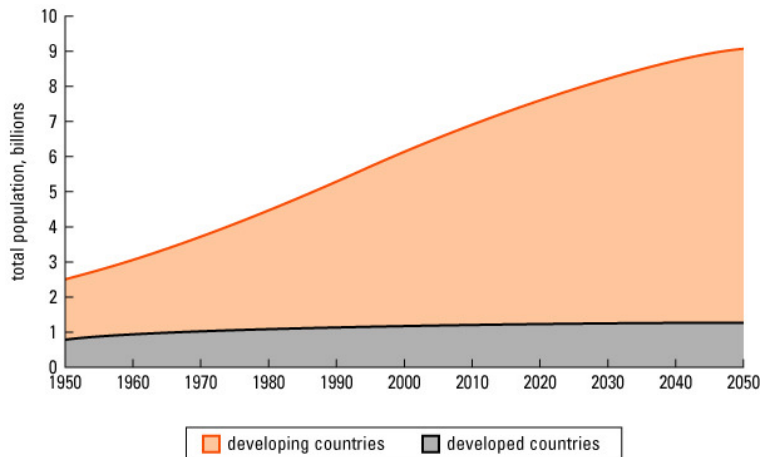
Malthus, in his 1798 *Essay on the Principle of Population*, argued that population has a natural tendency to increase faster than the means of subsistence, and that efforts should be made to cut the birth rate, either by abstinence or birth control.

While it could be argued that he was right about human history up to his time, he made his prediction for the future exactly at the time the industrial revolution and a similar revolution in agriculture caused a large increase in available resources that Malthus did not foresee.

Death rates (both adult and infant) began to decline, thanks to the improvements in health provision. It was not until the twentieth century, with ever more rapidly growing world populations and the advent of modern contraceptives, that fertility and population growth rates once again became the subject of debate.

In Western industrialised countries population growth had already declined significantly in the nineteenth and early twentieth centuries, for reasons that are still not entirely clear, since modern contraception was not yet available.

Population Growth 1950 – 2050



By the late 1950s and early 1960s countries in North Africa, Asia and Latin America had also begun to develop population policies as they began to realise the benefits of lower birth rates, as access to modern contraceptives grew.

A distinction should be made between absolute population growth (actual numbers) and the rate of population growth. They are not identical.

In the late 1960s the US and UK set up population departments, perhaps prompted by Paul Ehrlich in 1968 in his book *The Population Bomb* which predicted that hundreds of millions of people would die of starvation during the 1970s because the earth's inhabitants would multiply at a faster rate than the world's ability to supply food.

The world population was 4 billion by 1974

The Limits to Growth, commissioned by the Club of Rome in 1972, modelled the consequences of a rapidly growing world population and finite resource supplies.

The book echoes some of the concerns and predictions of Malthus and concludes that while limiting population growth would be difficult, such a long-term goal and the political will to achieve it are necessary if we are to avoid: *"the exponential growth that drives the world system toward the limits of the earth and ultimate collapse"*.

Foreign assistance for contraception did subsequently expand through the 1970s and 80s and there was increasing support from US administrations and the World Bank.

US President Johnson claimed that *"One dollar spent on Family Planning is worth \$100 dollars spent on other forms of development"*. And Robert Macnamara, then President of the World Bank, said: *"The threat of unmanageable population pressures is very much like the threat of nuclear war. Both threats can, and will, have catastrophic consequences unless they are dealt with rapidly and rationally"*

It can be seen that some apocalyptic language was already emerging, and this has coloured the population debates over the years.

By the 1984 UN Population Conference in Mexico, the link between population and development was established – ie that too high a rate of population growth was a barrier to economic development. And it was beginning to be recognised that there was a need to address the status of women through non-coercive population programmes offering contraceptive choices to fulfil their rights to control their fertility.

By the mid 1980s population growth rates were already declining in much of Asia and Latin America. But sub-Saharan Africa lagged behind, perhaps partly because of the pronatalism referred to below.

Population and Fertility rates

- ▶ Niger: 2010 population – 15.9 million
 - Children per woman: 5.7
- ▶ 2050 population – est. 53 million
- ▶ Kenya: 2010 – 40 million
 - Children per woman: 4.6
- ▶ 2050 population – est. 65 million

In the 1980s African governments were finally brought into the population movement. By this time their populations were already growing at unprecedented rates thanks to declining death rates but still high fertility (much the same situation prevails today).

It was during the 1970s-80s that the Green Revolution also took hold: it transformed agriculture around the globe. World grain production increased through the adoption of high yield varieties and improved irrigation. As a result, Ehrlich's predicted famines never materialized. Indeed, the death toll from famines steadily declined over the twenty-five year period, despite some high profile events like the 1984 Ethiopian famine. However, the global benefits of the Green Revolution have been short-lived. Agricultural productivity has declined in many world regions in the past two decades due to too much groundwater being extracted (for example on the North Plain of China), overgrazing, extensive slash and burn which resulted in soil exhaustion and erosion.

Moreover, the Green Revolution was supported by fertilisers and pesticides derived from fossil fuels and irrigation by new machinery powered by oil. These are, of course, finite resources and indeed the main culprits in climate change. There are those who would argue that history predicts that technical advances will solve all problems whether these are shortages of food supplies or climate change – the technical fix.

This view is held today by the so-called "cornucopians", such as Julian Simon and Bjorn Lomborg, who believe that people themselves are the solution to any problems and that continued progress and provision of material items for humankind can be met by advances in technology.

While most developing countries have seen significant declines in their rates of population growth, the population growth rate of Sub-Saharan Africa remains high making it harder for agricultural, economic and social benefits to keep pace with rapidly growing human numbers. In 2011 it is the double threats of runaway climate change, and the realisation that the oil on which our entire global structure has been built is going to run out, which are fuelling contemporary apocalyptic predictions.

Many global systems, including almost all industrialised countries as well as newly emerging industrial nations like China, India and Brazil, have become dependent on fossil fuels with their consequent carbon dioxide emissions that climate scientists agree are hastening serious and possibly uncontrollable climate change. Governments and the public have been painfully slow to take action on climate change despite increasingly vociferous warnings from the scientific community of the impending threats of flooding, drought and degrading of fertile lands to be expected as a result.

To return to our questions for today:

- ▶ **Does population growth matter? Why?**
- ▶ **Does it matter that over 200 million women are not able to control their fertility or space their children because of lack of access to family planning?**
- ▶ **Why has population dropped off the international policy agenda since the 1990s?**

As we move towards nine billion by the middle of the century, the assumption is that this is inescapable – but it is not. Something can be done about it.

Now let me pick apart the population jigsaw by referring to a number of heffalump traps, and then I will conclude with some suggestions for ways forward.

For those of you not familiar with the term 'heffalump' I refer you to the accounts given in the two books by AA Milne – 'Winnie the Pooh' and its sequel 'The House at Pooh Corner'. Might I remind you? Pooh and Piglet discuss digging a trap for Heffalumps but in the event they both fall into a trap themselves! How do we avoid that happening to us?

Well, obviously, we have to look where we are going. To give you some of my background: I was appointed in September 2001 to lead a population 'dialogue group' in the run up to the World Summit for Sustainable Development (WSSD) in September 2002.

My background had been in mainstream development (working for ITDG – now Practical Action) for 15 years, and then doing consultancy work for various development NGOs). In those days I knew nothing about population and if you had asked me, I would have trotted out the received wisdom:

"Take care of poverty and population will take care of itself"

The argument was that, once people were not 'in poverty' they would voluntarily choose to limit the size of their families. But that assumes availability of family planning resources.

I would also probably have said "educate the women and the problem will be solved". Of course educating women is enormously important but, on its own, it's not enough – you can have a PhD but if you don't have access to contraception, then you may have a baby on the way!

So I experienced a steep learning curve and met an entirely new range of people and organisations, who lived in a different box from the development NGOs with which I was familiar. I came quickly to realise that the 'population' arena was full of *heffalump traps*.

By the time I got to the World Summit in 2002 I had developed a network of people and had learnt an enormous amount about:

- a) How the UN works and
- b) Some of the sensitivities around the word 'population' – I learnt rapidly that I could mention 'reproductive health' but not 'population'. The very word seemed to raise almost visible hackles among the women's groups with whom I was working as though by using the word 'population' I was supporting coercion and denying women's rights.

The final document from the Summit mentioned 'Population' only once and that was in relation to 'fish'!

So after the Summit, we needed to build on the contacts made and the momentum created throughout the Summit process. It was clear to me that population bridged the environment, development and reproductive health sectors, but that nobody was talking about it and the sectors were not talking to each other.

The subject of population is discussed informally but remains very difficult to raise formally in international fora. Often discussion about population is full of passion, ignorance and prejudice: this makes any kind of mature and balanced discussion extremely difficult.

Many in the development and environment world are 'squeamish' about talking about population, because it has become so associated with coercion and inappropriate interference by the donor countries in the personal affairs of the recipients.

In 2003, colleagues and I created the Population and Sustainability Network (PSN) to facilitate dialogue on population issues across different sectors: environment, development and reproductive health, in order to influence policy makers on this complex issue. My successor at PSN quoted a colleague of hers recently at a conference: "God protect me from the simplifiers; I can cope with the complexifiers".

PSN's Overarching Principle

On one side of the coin:

The consequences of population growth (economic, social and environmental) for sustainability.



On the other side:

the consequences for sustainability of over consumption per person (with particular reference to CO2 emissions).



A word about terminology: from the time I was involved in development education I have used the terms 'majority' world for the developing world and 'minority' world for the rich world – we are of course the minority world!

Now at last, we get to the heffalump traps:

The Heffalump Traps

1. The Unholy Alliance
2. The Taboo
3. Language
4. The unintended consequences of Cairo
5. Family Size in the minority world
6. The Myth of Age Dependency
7. Per capita consumption
8. Population and Climate Change

Heffalump Trap 1: The unholy alliance of the US religious right, the Vatican and parts of the Islamic world. These are known as 'the opposition' (to family planning and abortion) in the reproductive health NGOs. Their contributions to the various international conferences have been almost wholly negative because of prejudice about contraception and particularly about abortion.

This backlash has come from the religious right – led by the Vatican, some Islamic leaders and some right-wing governments including the 2000-2008 Bush administration in the United States. The Vatican, together with various US leaders, has long been opposed to components of the 'population agenda' as it is opposed to contraception, abortion and adolescent sexuality education

Heffalump Trap 2: The Taboo

The taboo – that of mentioning the word ‘population’ – derives largely from the 1994 Cairo Population Conference (mentioned below). It needs to be challenged if Africa’s economic prosperity is to be assured and the rights of women in Africa to control their fertility are to be upheld.

Professor Cleland from the London School of Hygiene and Tropical Medicine, a population expert of many decades, expressed his frustration and sense of urgency at a policy conference:

“We’ve got to use straightforward and robust language. ... If we mean family planning or contraception we must say so.

If we are worried about population growth we must say so. ... I’m fed up with the political correctness that daren’t say the name ‘population stabilisation’, hardly dares to mention ‘family planning’ or ‘contraception’ out of fear that somebody is going to get offended. It is pathetic! ... if you donor agencies don’t get your act together and look at this problem honestly and talk about it openly, history will judge you very harshly”

[Professor John Cleland, key note speech in: *Demographic Dynamics and Socio-Economic Development*, Report of 5th International Dialog on Population and Sustainable Development, October 17 2006, Berlin, Germany].

It is argued that population growth makes progress in almost every area more difficult – it is the multiplier. There is now much more discussion about the population factor in the press, but it is still difficult to get major development or environment NGOs even to dip their toes into the population pool – they seem unable to get their mouths round the word ‘population’. And some of the reproductive health NGOs also find the word difficult.

The issue has become, in effect, out of bounds – partly through the efforts of the *unholy alliance* and indeed of the women’s movement who sought to protect women from the power of men.

The sexual health and rights language which now permeates the ‘population’ agenda has produced its own backlash that has exacerbated the problems of funding and political commitment to the field as a whole.

Policy Considerations

- ▶ How useful is the silence on population?
 - Can we bring this issue in from the cold, without unleashing the unacceptable face of population debates and language?
- ▶ Can we find a way to recognise and address resource consumption in the North and at the same time advocate increased access to sexual and reproductive health care services in the South?

Population growth puts pressure on natural resources, including water – and that makes life even more difficult for already vulnerable communities. And we also need to protect biodiversity, which, inevitably, is threatened by population growth.

When I first got into this subject, nearly 10 years ago, I carried out research into attitudes to population growth some key environment and development NGOs. Almost without exception, they did not see population growth as something with which they needed to be concerned. They saw ‘poverty’ and ‘consumption’ as the principal villains, and they baulked at a discussion of population numbers.

Heffalump Trap 3: Language

So are we going to tiptoe round this tricky area, or are we going to do as John Cleland says and use straightforward and robust language? I think the answer is – it depends on the audience. To some, one can be outspoken and challenging; to others a more delicate approach is necessary.

To some one might be able to spell out the global challenge of an additional 80 million every year – to the economy, to the environment and so on. And to others, one might talk about reproductive health and family planning and especially reproductive rights.

But in either case, it must be spelt out that it is the right of every woman and man to have a wanted pregnancy and properly spaced children. This should be an essential element of any discussion about population: **it must be within a 'rights' context.**

Much of the reason for 'population' disappearing off the agenda was because of the coercive practices of the 1970s and 80s – when, in Indonesia and India, women were sterilised at gun point and men were bribed to have vasectomies by being offered transistor radios. And the well known 'One Child' policy in China has its coercive aspects – and indeed, unintended consequences, with an emerging imbalance of young men to young women.

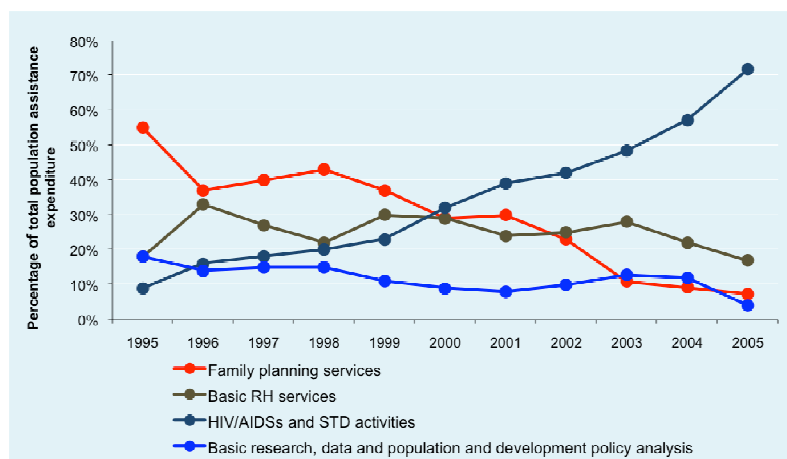
We want to make sure that family planning and supportive reproductive health services are readily available to all who want them.

Unfortunately there have been many people who have climbed on to soap boxes, and unwittingly, have made addressing the population growth and family planning issue even harder – perhaps another case of unintended consequences – see Trap 4 below.

Heffalump Trap 4: The unintended consequences of the UN Cairo population conference in 1994.

It was at the conference that the term 'population control', referred to above, became a pejorative term, implying coercion. Even family planning was no longer discussed, as it was replaced with "reproductive health" which became the only acceptable term to be used. Unfortunately, the term reproductive health is vague and can be interpreted in many ways, and worst of all, it has not captured the interest of most members of parliaments, or finance ministries – most of whom are men!

Family Planning and HIV/AIDS Spending



The unexpected and unplanned consequence of this change of language was that funding for family planning has steeply declined since Cairo, while funding for HIV/AIDS has risen significantly. HIV/AIDS became the predominant concern.

If you think about it, men (who generally manage international budgets!) are not usually knowledgeable about reproductive health. They can easily understand and relate to the term "family planning", because after all, they use it themselves, but "reproductive health" makes them roll their eyes – they cannot relate to it.

The result was the failure of the international community from 1994 onwards to deliver the \$17 billion per annum promised in Cairo for reproductive health and family planning services. Women, in the end, had a reduced chance of choosing whether or not to have a pregnancy since the family planning methods were not available. Surveys show that there are over 200 million women who

would like to use family planning but lack access to services and contraception – this is what is known as ‘unmet need’.

Many thousands – if not millions – of women have suffered from the absence of family planning supplies – probably many more than the unfortunate victims of the original coercive practices.

So one needs to be very aware of the nature of the audience to whom one is speaking. It is all too easy to be misunderstood.

One needs to avoid adopting the kind of language and practice which in the end has limited women’s options and rights rather than increasing them.

Poverty and Population

The number of people in extreme poverty in Sub-Saharan Africa have increased from:

- ▶ 230 million in 1990 to 318 million in 2001

Population and Poverty in Nigeria

- ▶ The proportion of poor people has risen from 28% in 1980 to 66% in 1996.
- ▶ Today Nigeria’s population is around 133 million (the most populous country in Africa) of whom 90 million live on less than \$1 a day
- ▶ With the population set to grow to 178 million in less than ten years, poverty reduction will be even more difficult.

The **fifth Heffalump trap** is family size in the minority world: for any population simply to ‘replace’ itself, the figure used is 2.1 children per woman. One could argue that this is a goal to be aimed for by all nations, rich and poor.

But in our culture, it is seen as unacceptably intrusive and abhorrent to make any suggestion that all of us, rich and poor, should be considering the negative effects of more children than two per couple. In the minority world, where the carbon footprint of each child is so much greater than that of a child in the poor parts of the majority world, it could legitimately be argued that we, in the rich minority world, should be having a one child policy.

Alas, I can’t myself see that being an acceptable policy. I was at a conference recently when the grandson of EF Schumacher (author of *Small is Beautiful* – that prophetic book of the early 1970s) referred to his four children. I wanted to call out – ‘why have you got four?’ I suspect that would have gone down like a lead balloon.

An article in the Observer in mid July 2011 suggested that there was a need to discuss whether those of us in the minority world should, responsibly, be having more than two children each. So this particular heffalump trap is being explored a bit.

Another stumbling block is that we are, in effect, talking about sex, procreation and intimacy. In many – if not most – cultures, this is delicate stuff and to discuss it openly is seen as intrusive and inappropriate. And abortion is another very tricky area.

The myth of age dependency – the sixth Trap:

There are those who say that we need to have population growth in the rich minority world in order to look after the increasingly aged population of our countries. But, logically, if you have a growing population to look after the old, when they themselves are old, you will need even more people to look after the new lot of old people and so on and so on.

Adair Turner in his work on pensions some years ago certainly thought that the concerns about an ageing population were overstated. He argued in a PSN event at the Royal Geographical Society in 2006 that, in our minority world:

...there are powerful economic benefits of smaller families and low population growth. Smaller families mean less expenditure on rearing children and on education: increased public expenditure on pensions partially offset by less on public education.

He continued by saying that he was not at all convinced that the UK should worry about the stabilisation and ageing of its population. He asserted that the biggest demographic challenge the UK faces over the next 50 years, is how to cope with the problems created by the fact that our population is likely to grow significantly.

Heffalump Trap 7: Per capita consumption – the other side of our population coin.

We, in PSN, feel it is inappropriate to talk about population growth in the majority world without acknowledging the fact that it is we in the minority world who are doing so much damage to the world – after all, 20% of the world's population (the minority world) consume 80% of the world's resources.

It is also important to distinguish between 'mitigation' and 'adaptation': the first refers to the efforts to reduce consumption and carbon dioxide emissions in the minority world; the second refers to the need for the majority world to 'adapt' to the changing world caused by climate change.

So we need to address the issue of the effects of unsustainable consumption, with a particular focus on climate change and threat to biodiversity and natural resources.

As I said earlier, it is proving very difficult to engage the environment community – generally speaking they only want to talk about per capita consumption as the main culprit in our world's problems. It is, of course very important, but we ignore population growth at our peril.

Returning to the consumption question: we need to talk about both consumption and population – it's not 'either or' – but 'both and'.

Heffalump Trap 8: Population and Climate Change

- ▶ The world's richest 50 million (about 7% of the global population) are responsible for 50% of CO2 emissions
- ▶ The world's poorest 3.5 billion people (50% of the world's population) are responsible for 7% of CO2 emissions
- ▶ So who is responsible for climate change?

What does climate change have to do with population growth?

Environmental and food security pressures caused by climate change are made worse in countries facing rapid increases in population.

We have to be very careful when we talk about population and climate change in the same sentence: it is the way of life of the minority world, principally, which is responsible for the huge increase in CO2 emissions, with our way of life so dependent on fossil fuels.

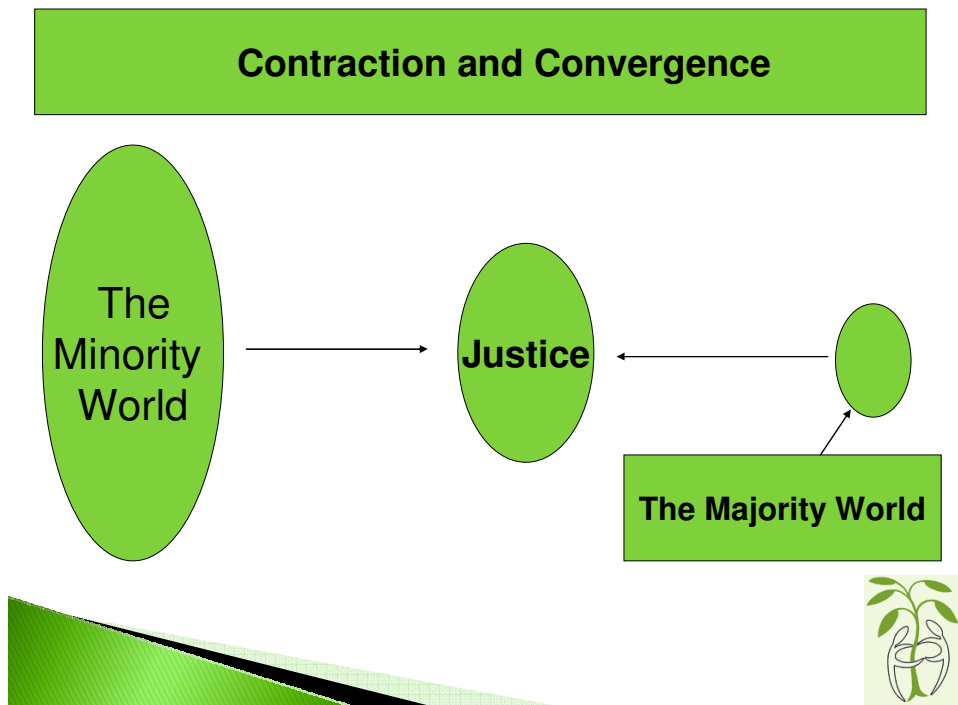
Those in the majority world have made a negligible contribution, comparatively, and it is vulnerable communities in the majority world who are already suffering from climate change.

Climate Change – a few facts

- ▶ The increase in Greenhouse Gas Emissions over the last 150 years has already significantly changed climate.
- ▶ The twelve warmest years on record have all occurred in the last thirteen years.
- ▶ IPCC reports best estimate temperature rises of 1.8° to 4°. However, global carbon dioxide emissions are already rising faster than the most dire of the IPCC emission scenarios

So the **Heffalump trap** is when we start talking about population and climate change as though this is cause and effect. The areas of the world where the least CO₂ is emitted are those with the highest population growth.

I would like to introduce the concept of **Contraction and Convergence**. The concept was developed by the Global Commons Institute and is a central part of discussions about how to achieve carbon emission reduction in an equitable way.



This framework for dealing with climate change, in brief, argues that the minority world needs to 'contract' its per capita greenhouse gas emissions, while those of the majority world are allowed to increase until the two amounts 'converge', thus arriving at an equitable and just level of per capita emissions across the world.

This approach makes the case that the right to emit carbon dioxide is a human right that should be allocated on an equal basis to all of humankind.

Often people say – well, there's no point in our doing anything about climate change while China expands economically and emits more CO₂ emissions, year on year.

Per Capita Emissions per annum

- ▶ United States: 20 tonnes
- ▶ UK: Nine tonnes
- ▶ China: less than four tonnes (but growing)
- ▶ Nigeria: less than one tonne

Firstly, their per capita emissions are still very low compared with the US or Europe (in the US it's 20 tonnes per person per year, in the UK, it's over 9 tonnes, while in China it's less than 4 tonnes, though growing).

But where do almost all our goods seem to come from now?

It is increasingly difficult to find something which has **not** been Made in China. So we are, in effect, exporting our emissions across the world, and then blaming China. China and India and indeed poor countries everywhere have a right to make every effort to reduce poverty. It is hypocritical and indeed unjust for us, who have it all, to say that other countries should not be developing.

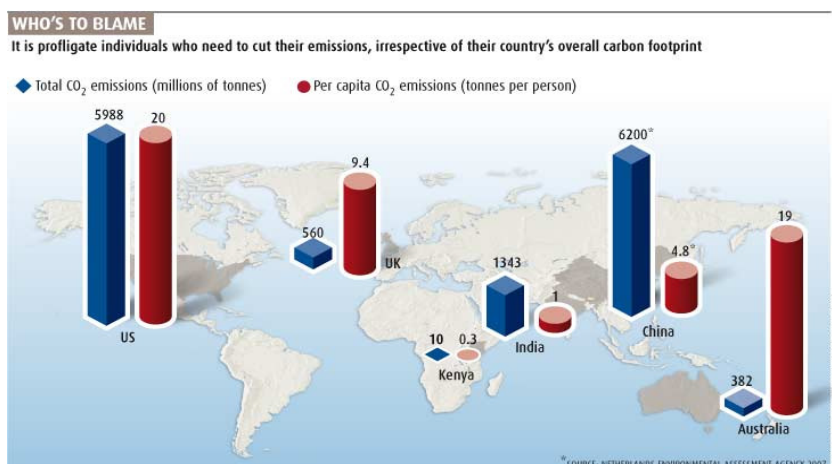
What model of development they should be striving for is a subject for another paper.

But certainly any model of development (in the minority and majority worlds) dependent on fossil fuel should be closely scrutinised – because fossil fuels will become ever more expensive and scarce, and because climate change is caused, principally, by fossil fuel emissions.

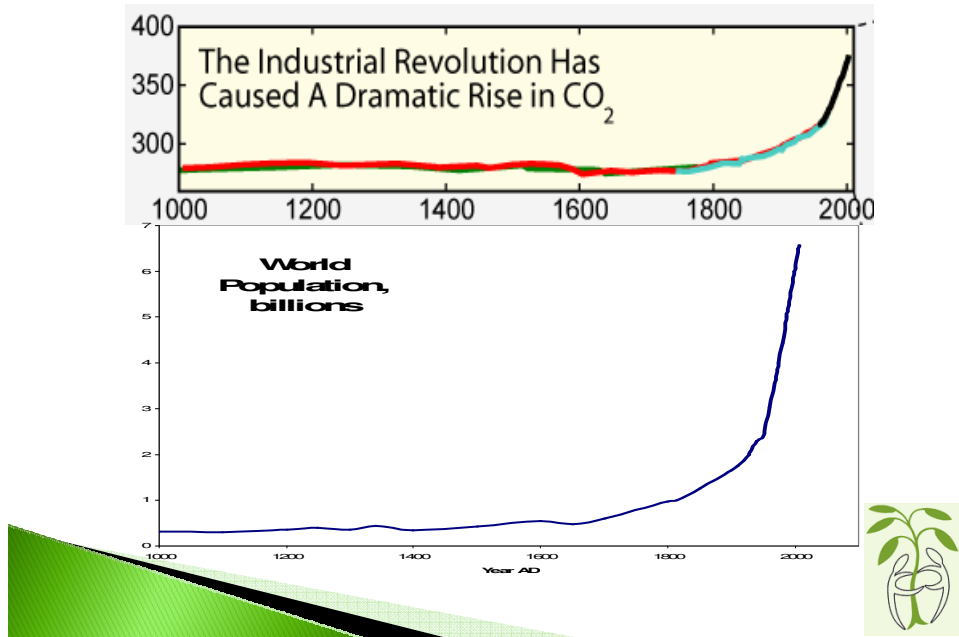
To return to population: if we go along with the Contraction and Convergence model, and we are working towards equity per capita, then the more people there are – wherever they are – the smaller CO₂ emission per capita allowance there will be for everyone, everywhere (though it will hit those of us in the rich minority world most).

So if we are now approaching seven billion, then, for the sake of the argument, we can emit seven billion tonnes per annum. If we are to have nine + billion, as seems increasingly likely (unless action is taken NOW to increase family planning services), then the per capita allowance will be less than one tonne.

If you are Rich, you become a Consumer



Global CO₂ : Population or Consumption



Correlation does not imply causation

So to return to my initial questions:

- Does population growth matter?
- Does it matter that over 200 million women lack the ability to control their fertility because of lack of access to family planning?
- And why has it dropped off the international agenda?
- And what's to be done?

I hope I have shown that population dynamics need to be part of any discussion about international development, sustainability and care for the environment, but we have to remain wary of the obstacles and traps which are everywhere and watch carefully for any that might come into our path – just like Pooh and Piglet.

And let me remind you – it's all about sex, death, race, power, religion, poverty, equality and justice – an explosive mix.

What, therefore do we need to do?

- We need an open and honest debate about the issues:

I'd like to make the case for Population literacy:

- We need to tread a path which brings in those who have rejected any discussion of population issues,
- and we need to find a way to persuade those with racist and inappropriate responses to understand how unacceptable their views are.

Personally, I am not optimistic about such a debate developing as there is such a history of people taking pretty rigid positions and mutual distrust and disapproval.

- We need: to respect the human rights of women and men to choose whether or not to have a child.
- We need: to reverse the fall in resources allocated to family planning and supportive services.
- We need: major development and environment NGOs to develop health programmes which include services for reproductive health and family planning – that is the way of putting into practice concern about population growth issues, with due care for human and reproductive rights;
- We need to remove the barriers that get in the way of making reproductive health services effective:

To highlight just three:

- the misinformation, for example about dangers of using the Pill, or indeed condoms
 - the belief that the more children there are, the better – known as pronatalism. This belief is buried deep in the psyches of many and.....
 - sexual double standards – the man saying ‘if my wife has contraception I won’t be able to trust her not to go with other men’. This conveniently ignores that the husband often has sex with other women.
- We need: research into population issues taking place in the mainstream development and environment community, including research into the relationship between population and climate change;
 - We would like: the governments of countries with high birth rates to recognise that this is a problem for their economies and environment and thus to support primary health care programmes which have at their centre family planning services. This is already beginning to happen, but not fast enough
 - On the consumption side – we need real recognition that per capita consumption of resources in the minority world has to be scaled back and reduced radically if climate catastrophe is to be avoided.

How about this as a slogan?

Children by choice not by chance

(this harks from the late 1980s)

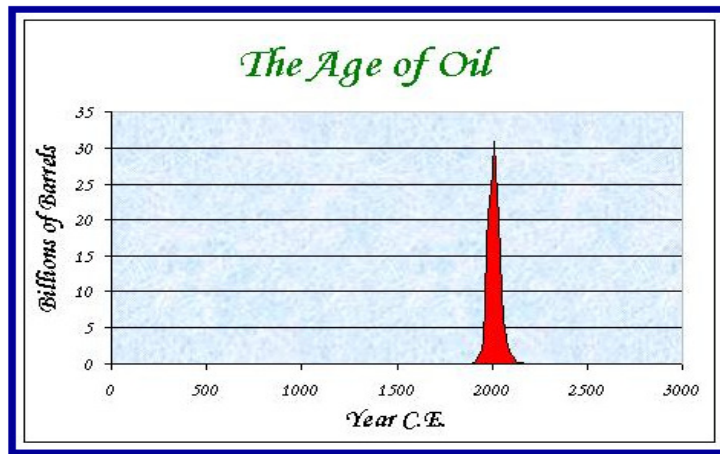
The inability of the minority world to do anything to reduce the threat of runaway climate change is very serious indeed. It could be argued that, because of our collective inertia and apathy, there will be cataclysmic events following from climate change:

- Famine
- Floods
- Drought
- Wars over water and other natural resources
- Movements of people as they struggle to escape from the rigours of climate change, resulting in armed conflict

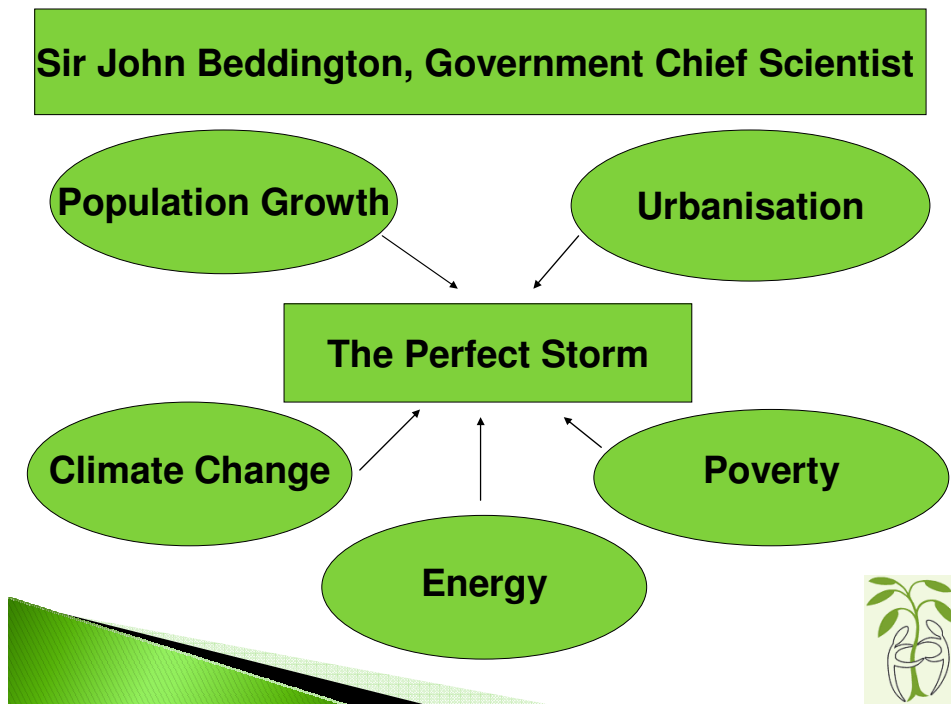
These upheavals could result in significant numbers of people losing their lives. Thus the population growth rate of the world might be slowed, even reduced.

Is that what we want? It would be much better if we were able to face up to the tasks, rather than, in effect, sitting back and letting disaster happen – grandchildren everywhere will wonder what on earth we were doing, being so passive and apathetic.

Those of us born since the Second World War have experienced a golden age – increasing wealth, health, options, peace and so on. In the total history of mankind, it’s probably a blink of an eye – made possible by the easy accessibility and cheapness of fossil fuels.



Sir John Beddington, the Government Chief Scientist talks about 'A Perfect Storm'



But do not let us forget the appalling situation that faces many women:

Maternal mortality and morbidity

- ▶ Each year 356,000 women die in developing countries from pregnancy-related causes.
- ▶ 20 million women have unsafe abortions.
 - 46,000 of these women die as a result.
 - 8.5 million need care for resulting health complications, 3 million of these don't receive it.
- ▶ A preventable tragedy:
 - In sub-Saharan Africa, a woman's risk of dying from treatable or preventable complications of pregnancy and childbirth over the course of her lifetime is 1 in 22, compared to 1 in 7,300 in developed regions.

(Gutmacher Institute, 2010 & UNDP, 2008)

And finally.... Would we be worried about population growth if the earth's resources were unlimited? A rhetorical question, of course. However, we do live in a finite world. People talk about the need to 'save the planet' – it, of course, does not need saving. It will survive. But life – human, animal and our natural environment on which we depend – might not survive if we continue to fail to rise to the challenge of both population growth and runaway climate change.

Kofi Annan: December 2002

"The Millennium Development Goals, particularly the eradication of extreme poverty and hunger, **cannot be achieved if questions of population and reproductive health are not squarely addressed.** And that means *stronger efforts to promote women's rights, and greater investment in education and health, including reproductive health and family planning.*"

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