



## Perspective on Human Population and the Environment

### PURPOSE OF THIS STATEMENT

The purpose of this statement is to inform stakeholders, partners and members of the public on the EWT's perspective on human population and development as it relates to biodiversity and our environment.

### BACKGROUND

The global human population is now more than 7.5 billion people. The United Nations estimates that this number will be nearly 9.8 billion by 2050 – this is 30% higher than it is today. Africa's population is set to double over the same period, increasing at a rate that is 1.5 times the global average.

It took until the early 1800s for the world's population to reach one billion. Even with technological advancements, the Earth's natural resources cannot support the growing needs of this number of human beings without degrading both the quality of human life and the environment on which we all depend. Ten thousand years ago, humans made up 1% of the weight of vertebrate land animals: the remainder of the biomass on earth was all wild animals. Today, wild animals make up just 1%, with the other 99% comprising humans, our farmed livestock and our pets (Smil, 2011). This imbalance poses concerns for the sustainability of many life forms on earth, and is a risk to the quality of life for much of humanity if left unaddressed.

The EWT believes that intergovernmental agencies, governments, and non-governmental environment and development organisations, need to work together more effectively and holistically to address the key drivers of population growth. These include *inter alia*, poverty, limited access to sexual and reproductive health education and services, and the disregard for women's rights. At the same time, firm measures must be taken – across the board – to reduce per capita resource consumption while supporting communities to become more resilient to climatic, social and economic changes.

The Endangered Wildlife Trust believes that an integrated Population-Health-Environment (PHE) approach is the most effective way to achieve sustainability and resiliency for people and the planet and therefore:

- SUPPORTS and PROMOTES investment in the provision of voluntary rights-based sexual and reproductive health services, information and education, in both developed and developing countries.
- SUPPORTS universal access to decent education, and the empowerment of women and girls.
- RECOGNISES THAT interventions that reduce fertility rates must be matched with equal efforts to reduce resource consumption.
- BELIEVES in the power of integrated approaches to conservation, the empowerment of women, education and rights-based approaches to achieving sustainability.
- ENCOURAGES government, business and civil society to develop and support integrated programmes that address the issues around human population, development and the environment in a holistic and collaborative approach.

*The EWT bases its positions on the best available information and data available at the time.  
Our positions and opinions may change as more information and data become available.*

## BACKGROUND AND CONTEXT

A number of counter claims and perceptions abound when discussing human population and the environment. Here are two common ones:

***Growing populations are essential for economic development.*** Proponents of this view believe that an increasing population implies an increase in the number of workers who can function as active participants in the process of economic growth and development. A growing population also constitutes a growing market for goods and services and an expanding market may stimulate business to invest more and grow the economy further, creating more income and employment in the process. While this may be true for an industrial society, in today's technological-driven societies, it is ideas that drive economies more than the physical numbers of people to work the line. In the developing world, rapid population growth has actually been shown to decelerate the pace of economic development over the long run ([1950–2008](#)). This is ascribed to a number of factors, including the age composition of the population and the lower investment and savings potential of large families vs smaller ones. High birth rates and rapid population growth in poor countries actually place a drag on economic development as large families have to spread scarce resources even thinner and often have much less capacity to save, invest, educate and provide adequate nutrition for their children. When the working-age population grows relative to the economically dependent youth, because of sustained reduction in fertility rates, this change in age composition provides a country with an opportunity in which it can potentially raise its level of savings and investment—a phenomenon known as the 'demographic dividend'.

***Through technological advances, we will figure out a way to increase planetary resource limits.*** The 19<sup>th</sup>-century economist, Thomas Malthus, warned that at prevailing population growth rates the planet would eventually be unable to feed and sustain itself. These ideas resurfaced 40 years ago, when Paul Ehrlich (*The Population Bomb*, 1968), Club of Rome, (*The Limits to Growth*, 1972) and William D. Nordhaus and James Tobin (*Is Growth Obsolete?*, 1972) postulated that population and conventional economic growth would destroy the planet. An alternative position, emanating from the work of the 20<sup>th</sup>-century economist and Nobel Prize winner, Robert Solow, is that environmental and other problems can always be resolved through the exercise of human ingenuity. While these two philosophies appear contradictory, we will need to apply both of them if we are to achieve real progress in solving the world's environmental problems ([Harvard Business Review](#)).

Using system dynamics theory and a computer model called "World3," a team of scientists analysed 12 scenarios that showed different possible patterns – and environmental outcomes – of world development over two centuries, from 1900 to 2100 ([Donella Meadows Project](#)). Most of the scenarios result in overshoot and ecosystems collapse – through a combination of depletion of resources, food shortages, industrial decline and other factors. After 2070, the costs of the various technologies, plus the rising costs of obtaining non-renewable resources from increasingly depleted mines, require more capital than the economy can provide. Criticisms of the original World3 model were that it underestimated the power of technology and that it did not fully represent the adaptive resilience of the free market. However, technology and markets are unlikely to prevent overshoot and collapse because they are merely tools to serve society as a whole. If the underlying drivers are to exploit nature, enrich the elites, and ignore the long term, then society will unconsciously select for technologies and markets that destroy the

environment, widen the gap between rich and poor, and capitalise for short-term gain. Further to that, current economic models allow us to externalise the environmental costs of production and extraction and this becomes a burden for future generations to bear. Just because we have the potential to develop technological solutions to increase planetary limits, it does not follow that these technologies will be implemented in time to avoid hitting the proverbial wall that constitutes planetary limits.

## THE FACTS

Our position on human population and the environment is based on the following facts:

- Ten thousand years ago, humans made up 1% of the weight of vertebrate land animals: the rest were all wild. Today, wild animals make up just 1%. The other 99% comprises humans, our farmed animals and our pets ([Smil, 2011](#)). The WWF Living Planet Index reveals that global populations of fish, birds, mammals, amphibians and reptiles declined by 58% between 1970 and 2012.
- The state of the world's marine fish stocks in 2016 puts us in a dire situation with 31.4% of assessed fish stocks estimated as fished at a biologically unsustainable level (overfished) and fully fished stocks at 58.1% ([FAO, 2016](#)).
- We are currently using up the resources of 1.7 Earths— unless things change, we will need three by 2050 (Global Footprint Network).
- Due to population growth, availability of land per person in developing countries is expected to halve by 2050.
- Thirty-eight percent of current agricultural land has been degraded (Food and Agriculture Organization).
- More than 4 billion people will live in regions short of water by 2050 ([waterfootprint.org](#)).
- The global demand for energy will increase by 30% by 2040 (International Energy Agency), causing further degradation of the environment to source fuel
- In developing countries, 776 million people are considered undernourished – about one person in six. Undernourishment is a central manifestation of poverty. It also deepens other aspects of poverty, by reducing the capacity for work and resistance to disease, and by affecting children's mental development and educational achievements. Reducing poverty can reduce resource degradation in instances where poverty is driving intensification of natural resource use ([Roe et al, 2015](#)).
- Sub-Saharan Africa has the highest fertility rate in the world, estimated at 5.2 per woman. In some countries (e.g. Chad, Democratic Republic of Congo, Niger and Uganda), fertility rates may be as high as 6.0 per woman and beyond.
- There are over 1.8 billion young people aged between 10 and 24 in the world today, the most populous generation of young people in history. Almost 90% of young people live in developing countries, where they tend to make up a large proportion of the population. A population's [age structure](#) (the relative size of each age group) deeply affects development opportunities and plays a major role in security and governance challenges. Rapid population growth often results in

increased pressure on the environment. The challenges produced by high fertility rates and the impacts of climate change often intersect in the parts of the world least prepared to adapt.

- South Africa's rate of population growth has increased from approximately 1.17% in 2002 to 1.61% in 2017. There are 16.7 million children under the age of 14 in South Africa, representing 30% of the total population ([StatsSA, 2017](#)).
- An in-depth study of four sub-Saharan African countries found that more than 60% of adolescents did not know how to prevent pregnancy and more than 30% did not know of a source for contraceptives. Unmet needs for contraception are due to limited access to information, quality and affordable adolescent and youth sexual and reproductive health services ([Amnesty International](#))
- According to the UN, there are over 200 million women in the world who want to avoid a pregnancy but are not able to use modern contraceptives, mostly because they do not have access to them either due to a lack of services or to a range of cultural reasons

There are four key concepts that underline our position on human population and the environment:

**Women's empowerment through a rights-based approach is central to the wellbeing of the human population and supporting biodiversity**

All women should have the right to determine whether they want to have children or not, along with all other human rights. This includes the right to access and use contraception without discrimination or coercion. Women and girls deserve equal access to education, full political rights, the ability and freedom to gain employment and to have every right and opportunity enjoyed by men. We know that where women have such rights, fertility rates almost always decrease. The war on poverty must not translate into a war on the poor. Achieving universal access to and information on voluntary family planning, empowerment of women and a reduction in poverty throughout the world will result in fewer unintended pregnancies, improved health and well-being of women and their families, and continued decline in global population growth, while maintaining basic human rights and dignity and improving the resiliency of families.

**Interventions to reduce fertility rates in low-income countries should be matched with equal efforts to reduce resource consumption in developed countries**

While birth rates are comparatively low in most developed nations, the consumption rates per capita are unsustainably high and put massive pressure on natural resources. We need action from governments to promote innovative and technological solutions to resource use reduction, efficiency and waste management. This needs to be done **in tandem** with a reduction in fertility rates – they are not mutually exclusive. The Royal Society states that there are no scientifically credible estimates for a global “optimum population” as far as environmental sustainability is concerned, partly because the level of consumption is a critical factor. For instance, the planet can

sustain far fewer people following a high meat and high carbon consumption pattern (current trends are towards this) than it can a low meat, low carbon lifestyle (a trend towards this is necessary).

**An integrated Population-Health-Environment (PHE) approach is the most effective way to achieve sustainability for people and the planet**

Population, Health and Environment ([PHE](#)) is an integrated community-based approach to development. PHE projects acknowledge and address the complex connections between families, their health, and their environment. They emphasise bringing conservation and reproductive health services to communities that both need and want them—particularly those who live outside the reach of any healthcare system, and on the edge of some of the world’s most vulnerable natural ecosystems. The reasons for this approach are that people face interconnected challenges, which need to be addressed holistically. This approach is also cost-effective – partner organisations are able to pool resources and reach new audiences. Integrated programs benefit individuals, but they also reap benefits at national, regional, and international levels. Improved demographic trends and conservation efforts in biodiverse areas are critical to ensuring long-term prospects for sustainable development and sustainable livelihoods. The effectiveness of integrated PHE investments for conservation outcomes was positively validated in high priority marine and terrestrial conservation sites with PHE programs in Philippines, Nepal, India, Mozambique, Madagascar, Kenya, Cameroon and the Central African Republic ([López-Carr, 2007](#)).

**Governments have a key role to play**

Governmental agencies need to bring consumption in line with planetary limits while ensuring equal opportunity for all people to live dignified and sustainable lives. They need to lead the transition towards a low carbon economy and support the implementation of the Sustainable Development Goals ([SDGs](#)). They need to provide rights-based sexual and reproductive health services to women and girls, ensure decent education for all, and tackle cultural issues that restrict women’s ability to make fundamental life choices, including the choice of family size. These goals are part of an equality and justice agenda, but also have a major demographic impact that results in additional benefits for environmental sustainability and human welfare by slowing rapid population growth rates. These additional benefits will be most pronounced in countries currently projected to double or triple their populations by 2050, yet which are already suffering the effects of severe environmental degradation and inability to meet basic universal welfare needs. However, it is important to stress that it is not morally acceptable to use coercion, including economic coercion, to achieve reductions in fertility.

**WHAT THE EWT AND OUR PARTNERS ARE DOING**

The EWT supports and encourages investment in the provision of SRHR and family planning information, education and services across the globe, in developed and developing countries. We also support and encourage universal access to decent primary and secondary schooling. We will actively lend our support to rights-based organisations campaigning on these issues, as well as those seeking a transition to a low-

carbon reduced consumption economy. The EWT only supports a voluntary rights-based approach to sexual and reproductive health services.

The EWT has joined the Population Sustainability Network (PSN) who is working to ensure that population dynamics are taken into account in the SDG international development framework, encouraging increased investment in voluntary family planning programmes that respect and protect rights, while also working to reduce unsustainable consumption.

Pathfinder International is a global non-profit organisation that focuses on reproductive health, family planning, HIV/AIDS prevention and care, and maternal health. The organisation operates in more than 20 developing countries throughout Africa, Asia, the Near East, and Latin America. Pathfinder places reproductive health services at the centre of all that it does – believing that health care is not only a fundamental human right but is critical for expanding opportunities for women, families, communities, and nations, while paving the way for transformations in development. The EWT is working with Pathfinder on the first integrated PHE project in South Africa in the North West Province, South Africa, to demonstrate the value that integrated programmes can bring to both conservation and human development causes.

In conclusion, we need to be able to have new and calmer discussions about human population and the environment. There is little doubt that population growth, coupled with unbalanced resource consumption, intensifies climate change, habitat loss, species extinction and poverty. Instead of asking ourselves whether we can survive with continued population growth, we might ask what that reality will look like and will we want to. In the technological age, it is ideas, not a head count, which will drive sustainable economic growth into the future.

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