

## RESPONSE TO SYNTHESIS OF VIEWS OF PARTIES

11 APRIL 2019

POPULATION MATTERS

### SUMMARY

- **Holistic approach to biodiversity is essential**
- **Population is a critical driver of biodiversity loss**
- **Effects of population growth are long-lasting and irreversible, therefore action to address them is needed before 2030**
- **Actions to address population growth support and are synergistic with achievement of Sustainable Development Goals**
- **Action to address population growth involves, and indeed depends on, women acting as “agents of change” and facilitates gender inclusion in the CBD process**
- **National action on population growth helps meet CBD goals and should therefore be facilitated and recognised in CBD process**

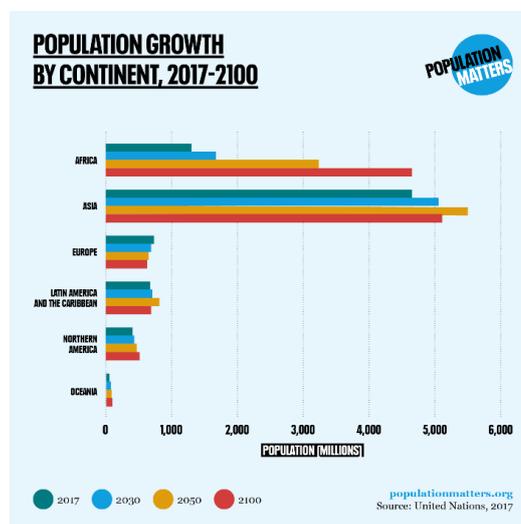
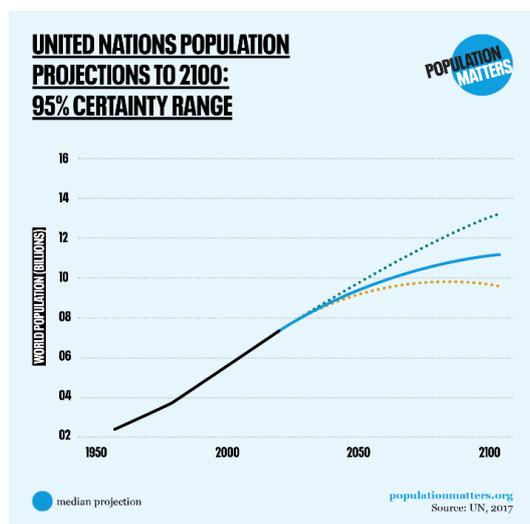
### CONCEPTUAL FRAMEWORK

Population Matters supports the position identified in the *Synthesis* document that the conceptual framework of the CBD needs to take a holistic approach, considering all direct and indirect drivers of biodiversity loss. Practical, available solutions or mitigating actions for all these drivers should be recognised as contributions to meeting the 2050 Vision and as appropriate to national plans and international frameworks under the CBD.

Furthermore, integration and consistency with the 2030 Agenda for Sustainable Development of the post-2020 Framework will enable Parties to “double count” actions which advance both sets of goals, and encourage them to identify and implement policies which do so.

### POPULATION PROSPECTS

According to the most recent UN projections, global population will continue to increase throughout this century. Its median projection is for a population of 11.2bn by 2100.<sup>i</sup>



That population growth will be driven primarily by Africa – however, the regional projections do not account for migration, which is likely to change the distribution of populations substantially. According to a recent Gallup poll, more than 750m people currently would like to move permanently from their countries of origin.<sup>ii</sup>

It is critical to note, however, that the UN’s projections of gradually reducing growth in no way represent an inevitable plateauing of population. According to the United Nations Population Division’s *World Population Prospects 2017* “for countries with high levels of fertility, there is significant uncertainty in projections of future trends, even within the 15-year horizon of the 2030 Agenda for Sustainable Development, and more so for the projections to 2100.”

Even more importantly, these projections are themselves dependent upon policy actions: “[t]o achieve the substantial reductions in fertility projected in the medium variant, it will be essential to support continued improvements in access to reproductive health care services, including family planning, especially in the least developed countries, with a focus on enabling women and couples to achieve their desired family size.”

In considering population effects, it is vital to recognise that short term dynamics have irreversible long term effects. With average global life expectancy currently 72 years and significantly higher in many countries<sup>iii</sup>, births occurring in the next ten years and beyond will have effects lasting until the end of this century and beyond. As a key driver of the proximate drivers of biodiversity loss (see below), addressing birth rate and population growth in the short term is both vital and urgent to futureproof other measures for the long term, whether specific biodiversity targets are set for 2030, 2040 or beyond. For this reason, appropriate short term targets or goals under the CBD must not act to discourage longer term benefits of actions related to population (or, of course, other drivers).

## HUMAN POPULATION AND BIODIVERSITY

Human population growth acts as a direct driver of almost all of the acknowledged drivers of biodiversity loss, specifically of habitat degradation/loss, exploitation, pollution and climate change. It is often identified as a challenge in CBD National Reports for this reason<sup>iv</sup>.

On a macro level, multiple scientific papers have identified population growth as a factor in global biodiversity loss, particularly over the last two years. Research published in the July 2017 *Proceedings of US National Academy of Sciences* reviewed data on 27,600 terrestrial vertebrate species, with a more detailed analysis of 177 mammal species. It identified the proximate causes of population extinctions as “habitat conversion, climate disruption, overexploitation, toxification, species invasions, disease, and (potentially) large-scale nuclear war—and concluded that “the ultimate drivers of those immediate causes of biotic destruction [are] human overpopulation and continued population growth, and overconsumption, especially by the rich.”<sup>v</sup>

Extracting the role of population in biodiversity loss is a relatively complex task that has nevertheless been undertaken in two papers this year.

In *Nature Ecology & Evolution*, Marques et al examined biodiversity loss and carbon sequestration through the measures of bird biodiversity and deforestation and used decomposition analysis to quantify the particular impacts of drivers including population and affluence. The research identified that environmental impact per unit of GDP has been declining, suggesting a greater efficiency of environmentally relevant economic activities. However, these efficiency gains were cancelled by overall growth and the authors concluded that “Economic and population growth have been driving the upward trend of impacts on biodiversity and ecosystem services, despite a reduction of the impacts per unit of GDP.”<sup>vi</sup>

Also published this year, the United Nations’ *Global Resources Outlook* report found that 90% of biodiversity loss and water stress are caused by resource extraction and processing (including agriculture). Analysis of specific drivers showed that globally, up to the year 2000, population growth was the strongest driver of increased resource extraction globally. From 2000 onwards, increasing affluence overtook population as the biggest driver, except for in Africa and West Asia, where rapid population increase remains the biggest cause.<sup>vii</sup>

The very highly cited<sup>viii</sup> World Scientists’ Warning to Humanity: Second Notice, published in *Bioscience* in 2017. This paper has now been endorsed by more than 20,000 scientists. It details decline in almost every marker of environmental resilience, and warns of “catastrophic biodiversity loss”. The paper identifies “*continued rapid population growth as a primary driver behind many ecological and even societal threats*”. The Warning lists 13 policy measures essential to safeguarding our future, including the provision of family planning and girls’ education to reduce fertility and “estimating a scientifically defensible, sustainable human population size for the long term while rallying nations and leaders to support that vital goal.”<sup>ix</sup>

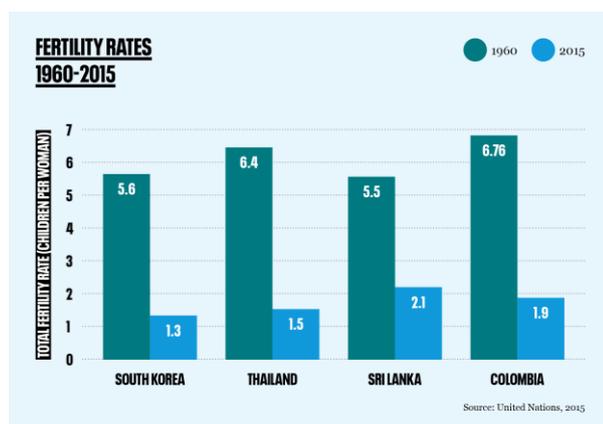
Two very recent studies have specifically examined the relationship between food and environmental sustainability, including biodiversity loss.

The EAT-Lancet Commission report on global food sustainability examines how to feed the human population up until 2050 without causing irreversible damage to the environment. It notes the multiple impacts on biodiversity of food production, including that 80% of extinction threats to mammal and bird species are due to agriculture. The study concluded that only a “transformation” would allow a global population of 10bn to be fed sustainably but that even with such a transformation, feeding a population of over 10bn without negative impacts on biodiversity and the environment is “increasingly unlikely”.<sup>x</sup>

The World Resources Institute’s *Creating a Sustainable food future*, published in December 2018, was specific in including reducing human population growth in its “menu” of actions to ensure food sustainability. It specified the goal of achieving replacement level fertility rates through voluntary means, including “*improving women’s access to education and healthcare in Africa to accelerate voluntary reductions in fertility levels*”.<sup>xi</sup>

## SUSTAINABLE DEVELOPMENT

The recipe for addressing population growth consists of tried and practical policy measures which have repeatedly proved successful and are entirely consistent with (and indeed enhance) human rights.



Mechanisms to secure lower fertility and sustainable populations through voluntary means do not require technological innovation, economically challenging interventions in production, trade or land use, or radical changes to existing social, economic and political structures. It is entirely possible in most circumstances to implement them without legislative changes.

This is not to say that any such changes may not be desirable – simply to acknowledge that population measures present viable policy options which are frequently consistent with existing paradigms.

Moreover, most of the actions required are already explicitly featured in the Sustainable Development Goals:

- End poverty and reduce inequality - SDGs 1, 2 and 10
- Provide universal access to high quality education – SDG 4
- Women’s empowerment – SDG 5
- Access to and uptake of modern family planning – SDG 3 and 5

Given the threat population poses to biodiversity, it is entirely appropriate and desirable that the post-2020 framework recognises that in addition to enhancing human wellbeing, these policies can help nations to achieve CBD goals. In this context, Population Matters strongly supports the position outlined in the *Synthesis* document that “*aligning the post-2020 global biodiversity framework with the 2030 Agenda will help to avoid the isolation of biodiversity from other global economic and social goals and allow biodiversity to be better mainstreamed and for the post-2020 global biodiversity framework to be implemented more effectively.*”

In many cases, these actions will have direct effects in addressing particular biodiversity problems or meeting specific goals at national level (such as in reducing human/wildlife conflict or local habitat loss). However, in some cases, positive benefits may not be significant or measurable within a ten year (or similar) time frame and it is imperative that the value of these actions does not go unrecognised because it does not help to meet shorter term goals.

Note that the fifth component of fertility reduction is encouraging smaller families, which is not clearly encompassed within the SDGs. This does not mean it should be neglected, or its value be unrecognised. It is effective in all scenarios but particularly important in countries with a relatively high Human Development Index which have usually already met the first four goals to a large extent (although significant inequality may still exist within them). These countries usually have relatively low fertility levels. However, they may still have significant local biodiversity problems exacerbated by population pressures and usually contribute significantly to global drivers of biodiversity loss, such as climate change or through demand for imported agricultural products leading to habitat loss.

Programmes to protect biodiversity through reduction of population pressure are, of course, already being employed at local level across the world – primarily in areas with high population pressure on demonstrably vulnerable biodiversity. The Population Health Environment model recognises the synergies and mutual benefits of improving the conditions of human communities in achieving local conservation goals,<sup>xii</sup> including through the provision of family planning services to reduce local human population pressures on biodiversity. Organisations successfully implementing this approach include Blue Ventures (Madagascar), Nature Uganda and Cheetah Conservation (Namibia).<sup>xiii</sup>

## GENDER

As acknowledged above, women's empowerment is inextricably linked with reduction of fertility rates - and thus population pressure<sup>xiv</sup>. Access and uptake of effective modern contraception methods is itself a form of empowerment but across the board, actions which provide greater personal, economic and political agency to women foster greater voluntary control of their fertility. The central role of women in themselves securing these positive changes is wholly consistent with women's ownership of environmental and biodiversity goals and the two can be and are mutually reinforcing. In a very direct manner, relief from the pressures of unwanted pregnancy and childbearing also empowers women to care about and protect biodiversity.

## HUMAN POPULATION AND THE POST-2020 FRAMEWORK

The integration of human population into the CBD presents the well-recognised challenges of translating a holistic approach into meaningful actions and targets. However, as an indirect - but fundamental and deeply significant - driver of almost all the key direct causes of biodiversity loss, failure to account for its influence or facilitate measures to address it would severely – in our view fatally – undermine progress to meet the 2050 Vision.

Many nations are already undertaking actions which reduce population growth, actions which are central to achievement of the SDGs. These actions are, as we have seen, also essential if the UN's population projections are to be achieved – but which are also vulnerable to political pressures (such as policies introduced by the Trump administration which severely curtail the provision of development aid for family planning<sup>xv</sup>). In addition to being the “beneficiary” of such actions, the CBD can also help to promote them, providing a mechanism by which nations can meet their CBD obligations while meeting other policy goals.

At minimum, the post-2020 framework should recognise the value of such measures in national action plans, and develop mechanisms to “credit” nations for their implementation and integration into those plans. Beyond this, it should identify mechanisms to promote their use. To do so would further embed the CBD within the 2030 Agenda and enhance progress towards both sets of goals.

As all Parties, Observers and stakeholders in the CBD understand, biodiversity loss is an emergency, and the urgency and importance of addressing it necessitates finding creative solutions to its challenges. In the words of the Synthesis document *“The post-2020 global biodiversity framework needs to be commensurate with the challenges of fostering the transformational change required to address biodiversity loss and achieve the 2050 Vision”*. In many respects, the CBD provides an opportunity and impetus for global changes that otherwise occur very slowly, or not at all. In the case of addressing the negative consequences of unsustainable human population growth, the CBD can be a leader in developing equitable, effective solutions.

## ABOUT POPULATION MATTERS

*Population Matters is a UK-based international charity which campaigns to achieve a sustainable human population, to protect the natural world and improve people's lives.*

*We promote positive, practical, ethical solutions – encouraging smaller families, inspiring people to consume sustainably, and helping us all to live within our planet's natural limits. We believe everyone should have the freedom and ability to choose a smaller family. We support human rights, women's empowerment and global justice.*

More information at [populationmatters.org](http://populationmatters.org)

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<sup>i</sup> United Nations Population Division (2017) *World population prospects 2017*

[https://population.un.org/wpp/Publications/Files/WPP2017\\_KeyFindings.pdf](https://population.un.org/wpp/Publications/Files/WPP2017_KeyFindings.pdf)

<sup>ii</sup> Gallup (2018) <https://news.gallup.com/poll/245255/750-million-worldwide-migrate.aspx>

<sup>iii</sup> World Health Organization

[https://www.who.int/gho/mortality\\_burden\\_disease/life\\_tables/situation\\_trends/en/](https://www.who.int/gho/mortality_burden_disease/life_tables/situation_trends/en/)

<sup>iv</sup> For example, Kenya <https://www.cbd.int/countries/?country=ke>

<sup>v</sup> Gerardo Ceballos, Paul R. Ehrlich, and Rodolfo Dirzo (2017) *Biological annihilation via the ongoing sixth mass extinction signalled by vertebrate population losses and declines*, from:

<https://www.pnas.org/content/114/30/E6089>

<sup>vi</sup> Marques, A. et al (2019) Increasing impacts of land use on biodiversity and carbon sequestration driven by population and economic growth. *Nature Ecology & Evolution*, 2019; DOI: 10.1038/s41559-019-0824-3

<sup>vii</sup> United Nations Environment Programme & International Resources Panel (2019) *Global resources outlook* (2019) <http://www.resourcepanel.org/reports/global-resources-outlook>

<sup>viii</sup> The Altmetric tool ranks the paper as among the top 5% of all research outputs it has ever tracked <https://oxfordjournals.altmetric.com/details/28854048#score>

<sup>ix</sup> Ripple et al. and signatories from 180 countries (2017) World Scientists' Warning to Humanity: A Second Notice, *Bioscience* <https://academic.oup.com/bioscience/article/67/12/1026/4605229>

<sup>x</sup> Willett et al (2019) *Food in the Anthropocene: the EAT-Lancet report on healthy diets from sustainable food systems* <https://www.thelancet.com/commissions/EAT>.

<sup>xi</sup> Searchinger et al (2018), *Creating a sustainable food future*, World Resources Institute <https://www.wri.org/publication/creating-sustainable-food-future>

<sup>xii</sup> USAid Environmental Health <http://www.ehproject.org/phe/phe.html>

<sup>xiii</sup> Population and Sustainability Network <https://populationandsustainability.org/about/our-members/>

<sup>xiv</sup> Review articles: *Our world in data* <https://ourworldindata.org/fertility-rate>, accessed 11 April 2019;

Upadhyay et al (2014) Women's empowerment and fertility: a review of the literature, *Social science and medicine* <https://www.ncbi.nlm.nih.gov/pubmed/24955875>;

<sup>xv</sup> PAI, The Global Gag Rule <https://www.kff.org/news-summary/pai-analyzes-potential-impact-of-expanded-mexico-city-policy-on-u-s-global-health-assistance-other-donors-funding/>